

# EPA WATER ENFORCEMENT: ARE WE ON THE RIGHT TRACK?

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## HEARING

BEFORE THE  
SUBCOMMITTEE ON ENERGY POLICY, NATURAL  
RESOURCES AND REGULATORY AFFAIRS  
OF THE

COMMITTEE ON  
GOVERNMENT REFORM  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

OCTOBER 14, 2003

**Serial No. 108-157**

Printed for the use of the Committee on Government Reform



Available via the World Wide Web: <http://www.gpo.gov/congress/house>  
<http://www.house.gov/reform>

U.S. GOVERNMENT PRINTING OFFICE

94-495 PDF

WASHINGTON : 2004

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## **EPA WATER ENFORCEMENT: ARE WE ON THE RIGHT TRACK?**

**TUESDAY, OCTOBER 14, 2003**

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ENERGY POLICY, NATURAL  
RESOURCES AND REGULATORY AFFAIRS,  
COMMITTEE ON GOVERNMENT REFORM,  
*Ipswich, MA.*

The subcommittee met, pursuant to notice, at 11 a.m., at the Ipswich Town Hall, Conference Room A, 25 Green Street, Ipswich, MA, Hon. Doug Ose (chairman of the subcommittee) presiding.

Present: Representatives Ose and Tierney.

Staff present: Dan Skopec, staff director; Danielle Hallcom, professional staff member; Yier Shi, press secretary; and Anthony Grossi, clerk.

Mr. OSE. This hearing of the Committee on Government Reform, Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs, is coming to order. It is 11:02 a.m., Tuesday, October 14th.

I ask that we allow Members not on the full committee to join us today for purposes of this hearing.

Hearing no objection, so ordered.

We have two panels of witnesses today. Mr. Suarez and Mr. Varney are on the first, and then the balance of the witnesses are on the second.

Congressman Tierney and I will each have an opening statement, after which we will swear in the first panel of witnesses. The first panel of witnesses then will be given 5 minutes to make their statements. We have copies of their statements that have been entered into the record, and copies of their statements are in the back of the room for anyone that wishes to read them.

After their 5-minute statements, we'll enter into questions, and then the court reporter here will record the answers. Everybody gets sworn in on this committee; it's just a tradition of the Government Reform Committee.

Our plan is that the first panel will go about an hour, we'll take a short break, the second panel will go about an hour, and then we'll be completed; it's obviously subject to change depending on how lengthy the question-and-answer period becomes.

Mr. Skopec will be monitoring the time. Mr. Skopec at 4 minutes will hold up a sign which says "One Minute," which means you have 1 minute remaining on your 5-minute testimony; hopefully we'll be able to go expeditiously.

I am pleased to be here in Ipswich today. In fact, as I was walking around the building, Mr. Varney was regaling us with tales of his youthful exploits in soccer on the football field.

But we're not here to discuss that; we're here to discuss the hugely important topic of the protection of our Nation's waters.

Massachusetts is well-suited for this discussion, as it faces the challenge of providing safe drinking waters and clean lakes and oceans in one of the Nation's oldest industrial centers.

Our focus today is the Environmental Protection Agency and its efforts to enforce the Clean Water Act. This hearing will explore the mutually reinforcing relationship between EPA's strategy of compliance assistance and formal enforcement, sometimes referred to as the carrot and the stick.

Both compliance assistance and traditional enforcement methods are fundamental tools to ensure successful environmental protection.

As President Clinton stated in his 1995 Reinventing Environmental Regulation report, the adversarial approach that has often characterized our environmental system precludes opportunities for creative solutions that a more collaborative system might encourage.

Since the mid-1990's, EPA has increasingly used compliance-assistance programs in conjunction with traditional enforcement tools to help facilities comply with Federal environmental laws and regulations.

Evaluating whether EPA's and the States' efforts have actually achieved results is a more difficult undertaking.

My background memorandum for today's hearing, which is located on the back table, contains statistics on traditional enforcement performance measures. However, merely tabulating the number of enforcement actions or outputs does not measure actual results.

For example, the collaborative work done by EPA Region 1 on the Charles River would not be reflected in the enforcement numbers for Region 1. Collaborative efforts can only be measured by more meaningful outcome performance data, such as the changes in the quality of the water.

The Bush administration has made a concerted effort to rate all Federal programs and activities to ensure that they're actually attaining their stated goals.

At the EPA, this means setting goals for cleaner air and water rather than measuring how many permits are issued or fines assessed. I commend the Bush administration for focusing on results and looking for new and innovative ways to protect the environment.

EPA's Office of Enforcement and Compliance Assurance—and I apologize for the acronyms, but we're going to use one now; we're going to refer to that as OECA from now on—recently completed an internal management review to understand the successes, failures, and data gaps in its decade-old National Pollutant Discharge Elimination System majors program.

EPA's efforts resulted in a report that takes significant steps toward gathering and analyzing meaningful data. EPA did not just

gather data; it analyzed policy implications and has taken steps to improve data collection and compliance.

Before we leave this point, I want to mention the majors program. Majors are defined for our purposes as facilities that discharge more than a 1 million gallons per day; minors are below that.

EPA's data show that the number of NPDES majors facilities in significant non-compliance has remained effectively the same since the program was first initiated under the Clinton administration in 1994. EPA came to its own conclusions that, while repeated non-compliance rates have been declining, overall compliance can be improved.

Similarly, EPA also determined that toxic exceedance levels and the percentage of facilities in perpetual noncompliance can also be decreased.

As a result of EPA's findings and their desire to reduce violations of the law, they have taken concrete actions by establishing a Watch List to systematically lower the number, frequency, and severity of repeat violations.

Moreover, the Watch List will not be limited to enforcing the Clean Water Act. It will also include repeat violators of the Clean Air Act and the Resource Conservation and Recovery Act, which is intended to control storage and disposal of hazardous waste.

I applaud EPA's efforts to vigorously pursue facilities that repeatedly refuse to obey the law.

This topic is particularly appropriate here in Massachusetts, where EPA has aggressively promoted innovative compliance-assistance programs to tackle its environmental challenges.

EPA and the regulated community have moved largely towards this goal, not by a sole reliance on aggressive formal enforcement actions, but by a collaborative effort to understand and eliminate the causes of pollution, and monitor water quality to determine success.

I applaud EPA's and the communities' collaborative efforts to clean up the Charles River. It can and should serve as a model for other regions around the country.

I'd like to welcome the following witness to our panel.

The first panel is composed of Hon. J.P. Suarez, Assistant Administrator, Office of Enforcement and Compliance Assurance of the EPA; joined by Mr. Bob Varney, the Regional Administrator for EPA Region 1, which is this part of New England.

Our second panel will be composed of, Mr. Steve Thompson, the executive director of the Oklahoma Department of Environmental Quality; Dr. Shelley Metzenbaum, visiting professor of the University of Maryland School of Public Affairs and director of the Environmental Compliance Consortium.

They'll be joined by Ms. Roberta Savage, the executive director for the Association of State and Interstate Water Pollution Control Administrators; Mr. Scott Segal, partner at Bracewell & Patterson LLP; Mr. J. Charles Fox, vice president of public affairs for the Chesapeake Bay Foundation; Ms. Pam DiBona, vice president for policy, Environmental League of Massachusetts; and Mr. Eric Schaeffer, director of the Environmental Integrity Project.

[The prepared statement of Hon. Doug Ose follows:]

**Chairman Doug Ose**  
**Opening Statement**  
**EPA Water Enforcement: Are We On The Right Track?**  
**October 14, 2003**

I am pleased to come to Ipswich today to discuss a very important topic: protection of our nation's waters. Massachusetts is well suited for this discussion, as it faces the challenge of providing safe drinking waters and clean lakes and oceans in one of the nation's oldest industrial centers. Our focus today is the Environmental Protection Agency (EPA), and its efforts to enforce the Clean Water Act. The hearing will explore the mutually reinforcing relationship between EPA's strategy of compliance assistance and formal enforcement.

Both compliance assistance and traditional enforcement methods are fundamental tools to ensure successful environmental protection. As former President Clinton stated in his 1995 "Reinventing Environmental Regulation" report, the adversarial approach that has often characterized our environmental system precludes opportunities for creative solutions that a more collaborative system might encourage. Since the mid-1990's, EPA has increasingly used compliance assistance programs, in conjunction with traditional enforcement tools, to help facilities comply with Federal environmental laws and regulations.

Evaluating whether EPA's and the States' efforts actually achieved results is a more difficult undertaking. My background memorandum for today's hearing (located on the table) contains statistics on traditional enforcement performance measures. However, merely tabulating the number of enforcement actions - or outputs - does not measure actual results. For example, the collaborative work done by EPA Region I on the Charles River would not be reflected in the enforcement numbers for Region I. Collaborative efforts can only be measured by more meaningful outcome performance data, such as the changes in the quality of the water. The Bush Administration has made a concerted effort to rate all Federal programs and activities to ensure that they are actually achieving their stated goal. At EPA, this means setting goals for cleaner air and water rather than measuring how many permits are issued and fines assessed. I commend the Bush Administration for focusing on results and looking for new and innovative ways to protect the environment.

EPA's Office of Enforcement and Compliance Assurance (OECA) recently completed an internal management review to understand the successes, failures, and data gaps in its decade old National Pollutant Discharge Elimination System (NPDES) "Majors" program. EPA's efforts resulted in a report that makes significant steps towards gathering and analyzing meaningful data. EPA did not just gather data. It analyzed policy implications, and is taking steps to improve data collection and compliance rates.

EPA's data show that the number of NPDES Majors facilities in significant noncompliance has remained effectively the same since the program was first initiated



under the Clinton Administration in 1994. EPA came to its own conclusions that, while repeated noncompliance rates have been declining, overall compliance can be improved. Similarly, EPA also determined that toxic exceedance levels and the percentage of facilities in perpetual noncompliance can also be decreased.

As a result of EPA's findings and desire to reduce violations of the law, EPA has taken concrete actions by establishing a "Watch List" to systematically lower the number, frequency, and severity of repeat violations. Moreover, the Watch List will not be limited to enforcing the Clean Water Act. It will also include repeat violators of the Clean Air Act and the Resources Conservation and Recovery Act, which is intended to control storage and disposal of hazardous waste. I applaud EPA's efforts to vigorously pursue facilities that repeatedly refuse to obey the law.

This topic is particularly appropriate here in Massachusetts where EPA has aggressively promoted innovative compliance assistance programs to tackle its environmental challenges. EPA and the regulated community have essentially achieved this goal not by aggressive formal enforcement actions but by a collaborative effort to understand and eliminate the causes of pollution and monitor water quality to determine success. I applaud EPA's and the communities' efforts to cleanup the Charles River. It should serve as a model for other regions around the country.

I would like to welcome the following witnesses to our panels: J.P. Suarez, Assistant Administrator, Office of Enforcement and Compliance Assurance, EPA; Robert Varney, Regional Administrator, Region 1, EPA; Steve Thompson, Executive Director, Oklahoma Department of Environmental Quality; Shelley H. Metzenbaum, Visiting Professor, University of Maryland School of Public Affairs and Director, Environmental Compliance Consortium; Roberta (Robbi) Savage, Executive Director, Association of State and Interstate Water Pollution Control Administrators; Scott H. Segal, partner at Bracewell & Patterson LLP; J. Charles Fox, Vice President of Public Affairs, Chesapeake Bay Foundation; Pam DiBona, Vice President for Policy, Environmental League of Massachusetts; and, Eric Shaeffer, Director, Environmental Integrity Project.

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**MEMORANDUM FOR MEMBERS OF THE GOVERNMENT REFORM  
SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES  
AND REGULATORY AFFAIRS**

FROM: Doug Ose 

SUBJECT: Briefing Memorandum for October 14 Field Hearing: "EPA Water Enforcement, Are We On The Right Track?"

On Tuesday, October 14, 2003, at 11:00 a.m., in the Ipswich Town Hall, 30 South Main Street in Ipswich, Massachusetts, the Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs will hold an oversight hearing on efforts by the Environmental Protection Agency (EPA) to enforce the Clean Water Act (CWA). The hearing is entitled "EPA Water Enforcement, Are We On The Right Track?"

The primary law governing pollution of surface waters is the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA) (33 U.S.C. 1251-1387). Originally enacted in 1948, Congress completely revised the CWA in 1972 and provided further revisions in 1977, 1981, and 1987. One of the CWA's principal enforcement and compliance tools is the National Pollutant Discharge Elimination System (NPDES) program whereby facilities that discharge wastewater from a point source directly into surface waters must obtain a NPDES permit from a State environmental agency. Forty-five States issue and enforce NPDES permits for renewable 5-year terms, specifying the control technology applicable to each pollutant, the effluent limitations a discharger must meet, and the deadline for compliance. Importantly, the CWA also requires a permit holder to maintain records, monitor effluent discharges, and automatically report monitoring data to EPA and the State. While EPA maintains a general oversight role, it has the discretion to step in when it deems necessary or at a State's request. EPA also retains jurisdiction over Federal criminal enforcement actions.

At any given time, approximately 52,000 facilities hold NPDES permits. According to EPA, 28 percent of all NPDES permitted facilities are industrial, 64 percent are municipal (various wastewater and drinking water facilities), and 2 percent are

Federal.<sup>1</sup> Within the NPDES program, EPA maintains the NPDES “majors universe,” which categorizes a permitted facility based on the design of its wastewater flow or a permit rating score, but excludes discharging facilities related to wet weather events. A “major” facility must meet EPA’s reporting requirements that enable EPA to monitor compliance levels.

When a facility violates its NPDES permit, there are often conflicting views on EPA’s or a State’s appropriate course of action. Since its inception in 1970, EPA has employed shifting enforcement strategies with varied degrees of success. More traditional strategies include enforcement activities, such as penalty assessment, administrative relief, civil actions, and criminal prosecutions. Traditional enforcement activities still maintain a prominent role in EPA’s enforcement strategy. However, in the early 1990’s, former President Clinton stated in his 1995 “Reinventing Environmental Regulation” report that the adversarial approach that has often characterized our environmental system precludes opportunities for creative solutions that a more collaborative system might encourage. To that effect, the Clinton Administration reorganized EPA’s Office of Enforcement for the purpose of augmenting traditional deterrent-based enforcement approaches with a complementary emphasis on compliance assistance.

With coordinated assistance from EPA and the States, compliance assistance helps the regulated community understand and meet their environmental obligations before the need for formal enforcement actions. Sector-oriented assistance addresses compliance issues or needs across particular business and industry sectors (e.g., dry cleaning, metal finishers, furniture manufacturers) or government sectors (e.g., local governments and tribal governments). Region I, where the Subcommittee will hold its hearing, utilizes a sector approach to educate marinas on how to improve environmental compliance and to promote best management practices. Also, to help facilities comply with the new stormwater Phase II program, Region I is maximizing its outreach efforts to help the large number of facilities and sites affected for the first time by EPA’s stormwater regulations. Region I also works with States to test and implement innovative regulatory approaches to deliver superior environmental protection, such as the Environmental Results Programs and regional innovations workgroups.

One of the important examples of successful compliance assistance can be found in Massachusetts. In the mid 1990’s, EPA Region I Administrator John DeVillars and his staff announced EPA’s goal to eliminate unlawful discharges into Massachusetts’ lower Charles River. EPA set a goal that the river would be clean enough to swim in by 2005. EPA used a combination of compliance assistance and limited enforcement actions to achieve its goal, while monitoring the river to determine whether water quality gains were met. EPA used several innovative tools, including hiring a consultant to help local governments, negotiating memoranda of agreement with localities, distributing names of suspected violators to consultants who then sold their services to localities, as well as

<sup>1</sup> In the mid 1990’s, EPA’s efforts to control pollution caused by wet weather events prompted EPA to greatly expand the universe of NPDES regulated facilities. EPA now requires facilities to obtain NPDES permits for stormwater runoff, sanitary sewer overflows and combined sewage overflows.

initiating several enforcement actions. Rather than imposing monetary penalties on communities, EPA negotiated agreements to eliminate the problem discharge connections that caused the unlawful and environmentally hazardous discharges. EPA's approach moved the Charles River project further, using fewer resources than solely taking enforcement actions against all violators. In this case, as with other compliance assistance success stories, one cannot evaluate the program's success by measuring traditional enforcement actions. Only by using meaningful outcome performance data, such as changes in actual river water quality, can the benefits of compliance assistance be measured.

In addition, to entice cooperation, EPA and the States work together to implement compliance incentives policies and programs that eliminate, reduce or waive penalties under certain conditions for business, industry, and government facilities that voluntarily discover, promptly disclose, and expeditiously correct environmental problems. Incentives include environmental self-audit protocols, Environmental Management Systems, Pollution Prevention, and other innovative projects and programs. Often, self-auditing renders unnecessary either formal EPA investigation or an enforcement action.

Despite EPA and the States' efforts, some facilities do not comply with the law. To address this problem, EPA recently established a "Watch List" as an internal management tool to help EPA and the States identify and bring into compliance those permit holders that are deemed by EPA to be in "significant noncompliance" with the CWA (and other environmental laws) for two consecutive quarters within the last year and have not faced formal enforcement actions (see Attachment A). The purpose of the Watch List is to reverse the trend over the last decade whereby 24-26 percent of "majors" facilities remained in significant noncompliance for a one-year period without a traditional enforcement action.<sup>2</sup>

The Charles River project taught EPA and the States several lessons. First, compliance assistance and formal enforcement are mutually reinforcing aspects of any regulatory program. Many facilities want to comply, given incentives, education and cooperation from government. Moreover, permitted facilities have a broad range of regulatory sophistication. Second, the success of compliance assistance, particularly in enforcing water quality programs, is best measured by outcome performance measures that measures changes in the affected waters rather than enforcement activities per se. It is very difficult to use the traditional enforcement numbers to establish trends to and away from environmental enforcement (see Attachment B). Third, environmental results can often be most efficiently achieved at the State level, where relationships between government and the regulated community is strongest and knowledge of the environmental challenges can be greatest.

The invited witnesses for this hearing are: J.P. Suarez, Assistant Administrator, Office of Enforcement and Compliance Assurance, EPA; Robert Varney, Regional

<sup>2</sup> According to EPA's 2003 NPDES "Majors" Performance Analysis, rates of significant noncompliance remained effectively stable since 1994. Data show an increase rate of 8 percent between 1994 and 1997, but EPA explains that definitional changes caused this increase.

Administrator, Region 1, EPA; Steve Thompson, Executive Director, Oklahoma Department of Environmental Quality; Shelley H. Metzenbaum, Visiting Professor, University of Maryland School of Public Affairs and Director, Environmental Compliance Consortium; Roberta (Robbi) Savage, Executive Director, Association of State and Interstate Water Pollution Control Administrators; Scott H. Segal, partner at Bracewell & Patterson LLP; J. Charles Fox, Vice President of Public Affairs, Chesapeake Bay Foundation; Pam DiBona, Vice President for Policy, Environmental League of Massachusetts; and, Eric Shaeffer, Director, Environmental Integrity Project.

Attachments

**U.S. EPA Office of Enforcement and Compliance Assurance (OECA)  
Facility Watch List Project Fact Sheet**

**I. What is the Facility Watch List?**

- A management tool to enhance the enforcement program's ability to identify and track facilities with serious violations and no apparent formal enforcement response under the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act.
- A key component of OECA's *Smart Enforcement* initiative to help EPA and the States use data in national systems to better focus enforcement resources on the most significant noncompliance problems.

**II. Purpose of the Watch List**

- Ensure timely and appropriate response to significant noncompliers or longstanding violators through better data analysis and routine discussions between OECA, the Regions, and the States.
- Expand on tools already used by the Regions and States by providing a management framework to facilitate EPA-State dialogue.
- Demonstrate EPA's commitment to use the data to focus on facilities identified with serious violations, due to the public's access to the SNC/HPV data through the Enforcement and Compliance History Online (ECHO) Web site.

**III. Watch List Development Process**

- The Watch List concept was tested with draft criteria between September and November 2002 with the EPA Regions.
- Between January and March 2003, a coordinating workgroup and three subcommittees from OECA and the Regions developed and finalized the data criteria and guidelines.
- The criteria are consistent with the existing enforcement response policies and timely and appropriate guidelines.
- EPA requested comments on the criteria from the ECOS Compliance Subcommittee.
- EPA and ECOS agreed that prior to developing the first Watch List, a data quality review will be conducted with the Regions and States.

**IV. Proposed Plan for Data Review**

- In September, OECA will distribute the information about the Watch List, along with draft data that can be examined for data quality problems.
- This data review period similar to that conducted for ECHO, but smaller in scope

- and duration.
- Regions and States will be provided with the location of a Web site accessible from the Online Targeting Information System (OTIS) to be used to examine potential Watch List facilities for data quality evaluation.
- Explanations for the listed facilities are not required during the review period.
- Data corrections will be made by the data owner (State or EPA) and reflected in OTIS after the monthly refresh.

#### V. Watch List Implementation

- After the data review, OECA will produce the Watch List on a quarterly basis.
- OECA will require from the Regions, for each facility listed, a code indicating the status of enforcement activity and a short explanation of the case status or planned response.
- Each Region should discuss the facilities with the States and determine what action is necessary to resolve the violation.
- We expect that Regions will need to meet quarterly with their States to develop the response. (Some Regions already have such meetings.)
- OECA intends to enhance the Online Tracking Information System (OTIS) to provide Regions with flexible analytic and reporting capabilities in regard to facilities on the Watch List.
- In addition to responding to those facilities identified on the Watch List, OECA wants to continue to improve data quality by having the Regions closely evaluate the rate of SNC/HPV identification within their States to ensure data on violations, SNC/HPV, and enforcement actions are being timely and accurately entered into the national systems.

#### VI. How the Watch List Will Be Used

- OECA will discuss responses with the Regions, and look for reductions in the number of facilities on the list over time.
- Facilitate discussions between HQ, Regions, and States in regard to facilities that appear to be the worst problems.
- All facilities that appear on the Watch List may not require an immediate formal enforcement response.
- The Watch List is not intended to serve as a report card or a public document.

**Draft Criteria to be Used During Watch List Data Quality Review Period - 7/22/03**  
**For Distribution to EPA and State Enforcement Personnel**

**Clean Air Act Criteria**

- |   |
|---|
| <b>A. Unaddressed HPV.</b> Current high priority violator (HPV) that has been in unaddressed (no action) status for greater than 270 days.                      |
| <b>B. Repeat HPV without Deterrent.</b> Current HPV with 3 or more findings of HPV (known as day zero's) within last 3 years without any penalty.               |
| <b>C. Lingering Addressed HPVs.</b> Four consecutive years of "addressed" but unresolved HPV status with current compliance status as "violation" or "unknown." |

**Resource Conservation and Recovery Act Criteria**

- |  |
|--|
| <b>A. Chronic SNC with No Action.</b> Current SNC facilities with 4 or more of the last 8 quarters in SNC and no enforcement actions in the last 2 years (all RCRA facilities).  |
| <b>B. Recent SNC with No Action.</b> In SNC for the last two quarters with no enforcement action. Criterion B is an early warning system that will indicate when facilities have been on the SNC list without action longer than the 180 days specified in the Enforcement Response Policy as the mark of a timely action. |

**Clean Water Act Criteria**

- |   |
|---|
| <b>A. Consecutive Significant Noncompliance with No Action (Automation of Exceptions List).</b><br><b>A1. SNC effluent violations in consecutive quarters with no action.</b> Facilities with 2 or more consecutive quarters of unaddressed SNC violations within the last year.<br><b>A2. Other SNC violations in consecutive quarters with no action.</b> Facilities with two quarters in a row of the same non-effluent SNC facility-level code (e.g., compliance schedule violation, DMR non-receipt) within the last year, and no formal enforcement action. |
|---|

**Criteria B, C, and D are considered "pilot" criteria**

- |   |
|---|
| <b>B. Repeat SNC with no enforcement.</b> Current SNC facilities with four or more of the last eight quarters in SNC and no formal actions taken in the last two years.   |
| <b>C. Repeat pattern of effluent violations with no enforcement.</b> Any facility with 25 or more monthly effluent violations over the last two year period, and no enforcement action since the beginning of that period.  |
| <b>D. Violations with potential for serious environmental impact.</b><br><b>D1. Serious one-time release without enforcement.</b> This is defined as any reported daily maximum measurement that is more than three times (200%) above the permitted level with no enforcement action taken at the facility following the violation.<br><b>D2. Serious one-time pH release without enforcement.</b> |



## Attachment B

### EPA Criminal Enforcement

	FY2002	FY 2001	FY2000	FY1999	FY1998	FY1997	FY1996	FY 1995
Referrals to DOJ	250	256	236	241	266	278	262	256
Monetary Penalties Assessed (millions)	\$62	\$95	\$122	\$62	\$93	\$169	\$77	\$23
Number of Defendants Charged	325	477	360	322	350	322	221	245
Total Jail Time (years)	215	256	146	208	173	196	93	74
Total Investigations/cases initiated	674*	482	477	471	636	551	548	562

\* FY02 Cases initiated includes 190 counter terrorism investigations initiated.

Source: OECA Measures of Success Reports, FY 1997 to FY 2002

OECA/OC/EPTDD/IUTB  
September 30, 2003

Mr. OSE. I'd like to recognize my good friend from this part of the country for purposes of an opening statement, Mr. Tierney.

Mr. TIERNEY. I would like to thank the chairman very much, and welcome him to Red Sox Nation after last night.

He didn't get here in time for the game, unfortunately; but he certainly heard the results, probably heard the cheering all the way up in the air when the plane was coming down.

I want to thank you, Mr. Chairman, for conducting this hearing in Ipswich, MA, in this particular district.

You did one other hearing previously on energy in Peabody—not "Pea-BOD-y"—and I think it's important that we take some of these hearings out around the country, so that people don't always have to feel that everything happens inside Washington and that people are excluded.

I commend the chairman for his willingness to do that throughout the country; this committee has been as eager, I think, as anybody else to do that on a regular basis.

This is a good place to have this meeting, here at the Ipswich River, near the mouth.

The river begins, Mr. Chairman, in Burlington and Wilmington, down in Middlesex County, and flows about 40 miles before entering Plum Island Sound.

It encompasses about 155 square miles, and spans all or parts of 21 communities in Middlesex and Essex Counties; 330,000 people, and thousands of businesses, receive their water supply from the Ipswich River.

The river provides a rich habitat for a wide variety of wildlife and aquatic species, and remains essential to the ever-growing ecotourism industry, attracting beachgoers, birders, canoeists, anglers and hikers.

This river is the example of the distance traveled since the Clean Water Act was implemented in 1972 to restore and maintain the chemical, physical and biological integrity of the Nation's waters.

The good news: The Clean Water Act mandate to enforce discharge limits against industries has been largely effective in this area in recent years.

The only National Pollutant Discharge Elimination System major permittee in the watershed—Bostik Findley in South Middleton—has historically been a pollutant; but, thanks largely to the Clean Water Act, the company has taken steps to reduce its impact on the river and to clean up pollution on the site.

Again, we get into these acronyms a little bit. The National Pollutant Discharge Elimination System is going to be referred to as the NPDES, because we can't keep saying it over and over again. We're referring again to major permittees.

The recent improvements in plant and collection infrastructures of the only major wastewater treatment facility discharging into the Ipswich basin have addressed historical pollution problems. That's, of course, the town of Ipswich's wastewater treatment facility.

There are still occasional violations of discharge limits of fecal coliform, and it's a little bit difficult to meet the copper limits, as Mr. Varney and I were discussing; but, I think that's purposeful,

trying to set the bar high and knowing that the community is going to try to meet that.

The improvements are real; the benefits are tangible for our shellfish industry, for our fishermen and for our swimmers; obviously everybody wishes we had gotten here sooner, but we're pleased that we're moving in the right direction.

But the Ipswich River also has some problems. It continues to be the third most endangered river in the Nation according to some advocates, in particular the American Rivers, who put out its report in 2003.

It is pumped dry chronically, often causing major fish kills; dissolved-oxygen levels are still an issue; use of non-aquatic recreational vehicles on the riverbed is a serious issue; and, water withdrawals for wastewater transfers continue to be a concern.

Mr. Chairman, for a fuller exposition of some of those issues, I'd like to put on the record at the appropriate place the unanimous consent to enter two statements.

One is a statement of Joel Mintz, professor of law at Nova Southeastern University Law Center. The other is by Kerry Mackin, executive director of the Ipswich River Watershed Association.

Mr. OSE. No objection.

Mr. TIERNEY. Thank you.

So you can see, Mr. Chairman, that although the Clean Water Act has been upheld and continues to be the law, its strengthening and enforcement remain crucial to the Nation's environment and to its health.

One of our witnesses will testify today that in States that are confronted with severe budget problems the Federal mandates of the Clean Water Act ensure adequate enforcement of at least those areas that fall within the scope of the act.

Many people are concerned with diminishing State enforcement abilities and commitment, given these budget constraints.

The February 2003 National Pollutant Discharge Elimination System [NPDES], Majors Performance Analysis has given many people cause to be concerned about the Federal Government's continued commitment to enforcement of the Clean Water Act.

This hearing is not intended to be partisan. The EPA issues on this subject, and in fact to the 2003 report just cited, span a period from the last administration into this administration; but concerned people can note what appears to be a general retreat from enforcement of environmental standards under the current administration.

Sunday's papers recounted a new interpretation of a law that purports to allow miners to degrade far more acreage than previously permitted as they mine ore.

Friday's papers reported that the Assistant EPA Administrator for air policy, Jeffrey Holmstead, is said by some former EPA enforcement officials to have testified before Senate committees that the Bush administration's efforts to soften clean-air enforcement rules would not harm pending lawsuits against aging coal-fired plants, even though key aides had told him just the opposite previous to that.

Obviously, these lawsuits that were bearing fruit in holding energy plants to standards are a concern in this New England region;

and the President's New Source Review Rule certainly makes changes that may undermine some of the protections that we rely on in this particular region.

After the failure for many years to comply with the Total Maximum Daily Load [TMDL], the program established in the Clean Water Act, EPA proposed new rules in 2002 that were directed at cleaning up the waterways within the next 10 to 15 years. Unfortunately, the Bush administration has recently withdrawn those proposed rules.

I noted as recently as yesterday that the report coming out on what may be in the energy bill that's in conference right now is that there was one effort to have EPA issue a final report; and, instead of waiting for that report to come out on environmentally controversial drilling techniques, the energy bill may now seek to exempt the technique from controls of the 1974 Safe Drinking Water Act.

Also, the energy bill language may do away with the requirement that construction activities related to oil and gas exploration operate with a permit under the Clean Water Act.

Obviously, the warning there is that oil and gas exploration can go forward without controls on stormwater runoff into lakes, rivers and streams.

Also, the bill would make it easier for companies to get Federal aid to clean up leaks and spills even if the companies caused the problem and are financially able to pay. It would limit manufacturers' and refineries' responsibility for certain gasoline additives like MTBE and would take them off the hook for participating in the cleanup there.

So there are many reasons why we're concerned.

Of course, reports of the most recent study on the NPDES raised concerns that I know the Assistant Administrator, Mr. Suarez, is going to address and give us some information on.

I understand, Mr. Suarez, that the analysis was done as a tool for managing the NPDES majors program based on performance data. I applaud the efforts of the EPA for this periodic review, improved data collection and utilization, and efforts for continual improvement. We would like to explore during the context of the hearing just how that's being done.

This hearing was requested to examine the report's offerings, and to assess EPA's commitment to the enforcement of the Clean Water Act and its plans on how it intends to do so, particularly in view of that report.

We look forward to hearing answers to questions on a number of issues, such as the data quantity and quality; the effect of penalties on compliance and deterrence; any need for clarification as to whether extreme exceedances of toxic-water-quality-based permit limits are the result of unachievable limits due to technology availability or costs; what is being done about Federal facility significant noncompliance cases; and what are the reasonable interpretations of data and the correct measures to follow such slowing or declining enforcement activity, and how has that impacted the deterrent effect of your agency.

Data seems to show that most of the States and regions with the lowest activity levels of enforcement also have the lowest rates of

overall compliance; and we want to discuss whether or not that suggests a positive relationship between the EPA and State enforcement activity and compliance.

We also want to know, Mr. Assistant Administrator, what we are to make of the administration's fiscal 2004 budget proposal that would cut 54 full-time enforcement positions, and what effect that would have on the things we're going to talk about today.

So, Mr. Chairman, I want to thank you for scheduling this hearing, and for having it here. I want to thank all the witnesses in advance and thank them for joining us; we look forward to your testimony.

Mr. OSE. Thank you, Mr. Tierney.

As I said at the outset, we historically have always sworn our witnesses.

Gentlemen, if you would please rise and raise your right hands.  
[Witnesses sworn.]

Mr. OSE. Let the record show both witnesses answered in the affirmative.

Our first witness today is the Assistant Administrator for the Office of Enforcement and Compliance Assurance at the Environmental Protection Agency.

Mr. Suarez, you're recognized for 5 minutes.

**STATEMENT OF JOHN P. SUAREZ, ASSISTANT ADMINISTRATOR, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE, ENVIRONMENTAL PROTECTION AGENCY**

Mr. SUAREZ. Thank you.

Mr. Chairman, Congressman Tierney and members of the committee, I really appreciate the opportunity to testify before you today.

As you indicated, I am J.P. Suarez, Assistant Administrator for the Office of Enforcement and Compliance Assurance at USEPA.

I am here today to report that our water enforcement program is on the right track and is protecting our Nation's waterways from illegal and harmful discharges of pollution.

In my testimony today, I would like to provide a brief overview for you of the smart enforcement initiative currently being undertaken throughout the offices of OECA and explain how smart enforcement relates to the water enforcement program.

I will also provide recent examples of successes in the water enforcement program that are helping to improve water quality throughout the United States.

Upon beginning my tenure at the EPA, I launched what we are calling the smart enforcement initiative throughout the Office of Enforcement and Compliance Assurance Programs at EPA.

Smart enforcement requires that we use the most appropriate enforcement tools to achieve the best outcomes, to address the most significant problems as quickly as possible.

The principle is the culmination of our work and experience within the enforcement and compliance assurance program. It crystallizes the lessons we have learned over the years into a strategy for action.

Smart enforcement incorporates several key areas. The first and foremost priority within the smart enforcement initiative is to en-

sure that we are addressing the most significant environmental, public-health, and compliance problems.

The problems we face range from massive amounts of raw sewage being discharged into our waterways, to dangerous amounts of air pollution being released from refineries and other sources, and everything else in between.

Within this broad spectrum, smart enforcement focuses our efforts on the most significant cases. It forces us to ask, where can we make the biggest difference in protecting human health in the environment?

The second component is to measure our enforcement success by the actual environmental benefits realized. Not only are we looking at the numbers of enforcement actions we could produce at the end of a given year; we are asking ourselves the question, is the air cleaner, is the water purer, and is the land better protected?

This is our true measure of success: What are the outcomes of the work that we do?

We see this as measuring the real benefits from enforcement activity, as opposed to simply counting numbers or beans from our enforcement work. Measuring real outcomes, I believe, is the most appropriate way to determine whether we are fulfilling our obligations to the public.

The third area of concentration is to use data to make more strategic decisions in order to target and discover the most egregious violators, and ensure better utilization of our resources.

Over the years, EPA and the States have accumulated vast amounts of data. As we begin to analyze this data, we are able to uncover valuable intelligence that leads us to the most significant areas of noncompliance, so that we can take action to address that.

The fourth area of focus is to continually improve the management of the enforcement program. This is done by honestly and openly assessing the effectiveness of our current and past program activities to ensure continuous program improvement.

An example of this is the recent OECA analysis of the NPDES majors portion of the Clean Water Act. The report identified patterns of noncompliance and enforcement activity levels from 1999 through 2001.

These types of reports allow managers within OECA to improve the program, and ensure that the environment and public health are not being compromised. To be successful, we must continuously assess our program activities to ensure performance and continuous improvement.

The fifth and final factor within smart enforcement is to communicate the environmental, public-health and compliance outcomes of our activities more effectively.

An example of making compliance information readily available is the enforcement and compliance history online [ECHO] system.

Through the ECHO system, the public has facility compliance history right at their fingertips, online, 24 hours a day, 7 days a week.

Making data available to the public increases accountability for facilities, and encourages compliance. ECHO provides the public SNC data, and further demonstrates the EPA's commitment to use

data to manage the program and to focus on facilities identified with serious violations.

I'd like to turn now to the specific issue of water enforcement.

We are improving upon previous water enforcement programs in EPA. As you mentioned, in February of this year we developed a report, "A Pilot For Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program."

The purpose of this report was to identify patterns of noncompliance and enforcement activity levels from 1999 through 2001. The report analyzed the NPDES majors program, which is only one component of the water enforcement program.

Consistent with the principles of smart enforcement, support is being used as an internal tool to provide us with the information that will help us better manage the NPDES majors program.

The announcement provided OECA managers an opportunity to strategically develop recommendations designed to improve the NPDES majors program.

The report showed many things, and I'll be happy to talk about that in a moment with you. But, it's important to bear in mind that not all facilities that are designated in SNC require a formal enforcement action to return to compliance.

Data show that 49 percent of facilities recover from SNC without formal action at all. Also, some facilities in SNC have pending investigations and enforcement actions which are confidential and are not reflected in data bases at all.

Our report also analyzed penalty data, but it is again important to note that States are not required to submit penalty data to EPA.

I look forward to speaking with you further about the results of our report, as well as the other significant activities that we are undertaking at EPA to improve the enforcement program.

It is not just the NPDES major program that we're dealing with, but a number of other areas; including wet weather, stormwater and enforcement. I look forward to that opportunity, and I appreciate the opportunity to come here to Ipswich and to talk to you all about the great strides we are making to make sure that our air stays clear, our water is pure, and our land is protected.

Mr. OSE. Thank you, Mr. Suarez.

[The prepared statement of Mr. Suarez follows:]

**Testimony of  
John Peter Suarez  
Assistant Administrator  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency**

**Before the Subcommittee on  
Energy Policy, Natural Resources and Regulatory Affairs  
U.S. House of Representatives**

**October 14, 2003**

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to testify today. I am John Peter Suarez, Assistant Administrator for the Office of Enforcement and Compliance Assurance (OECA) at the U.S. Environmental Protection Agency (EPA). I am here today to report that our water enforcement program is on the right track and is protecting our Nation's waterways from illegal and harmful discharges of pollution. A key component of any managed program is a continuing effort to identify problems within the system so that we can concentrate on correcting any deficiencies. That is what we have done and are doing in my office.

In this testimony, I will provide a review of the Smart Enforcement initiative currently being implemented throughout OECA and explain how Smart Enforcement relates to the NPDES enforcement program. I will also provide recent examples of successes in the water enforcement program that are helping to improve water quality throughout the United States.

**SMART ENFORCEMENT**

Upon starting at EPA, I launched the Smart Enforcement initiative throughout the enforcement and compliance assistance programs at EPA. Smart Enforcement requires that we



use the most appropriate enforcement or compliance tools to address the most significant problems to achieve the best outcomes as quickly and effectively as possible. The principle is the culmination of our work and experience within the enforcement and compliance assurance program. It crystalizes the lessons we've learned over the years into a strategy for action. Smart Enforcement incorporates five key areas of focus.

The first and foremost priority within Smart Enforcement is to ensure that we are addressing the most significant environmental, public health, and compliance problems. The problems we face range from raw sewage being discharged into our waterways to air pollution being released from refineries and coal-fired power plants operating in violation of permits and everything else in between. Smart Enforcement focuses our efforts on the most significant cases. It forces us to ask: where can we make the biggest difference in protecting human health and the environment.

For example, I personally place great importance in ensuring that the concepts of environmental justice are properly addressed in everything we do. In line with our focus on targeting those who are putting the environment and public health at risk, I am of the firm conviction that no community, regardless of race, color, national origin, culture, education or income, should have to bear more than their fair share of environmental burden. That is why environmental justice is a high priority in my office and a key part of Smart Enforcement.

The second component is to measure our enforcement success by not only looking at the numbers of enforcement actions we can produce at the end of a given year, but to measure our success on whether our actions produce cleaner air, purer water and better protected land. We see this as measuring the real outcomes from enforcement activity as opposed to simply counting

numbers. Measuring the real outcomes, I believe, is the most appropriate way to determine if we are fulfilling our obligation to the public.

The third area of concentration is to use data to make strategic decisions in order to target and discover the most egregious violators and ensure better utilization of our resources. Over the years EPA and the States have amassed a huge storehouse of data. As we analyze this data, we are able to uncover valuable intelligence that leads us to the most significant areas of non-compliance.

The fourth area of focus is to continually improve the management of the enforcement program. This is done by honestly and openly assessing the effectiveness of current and past program activities to ensure continuous program improvement. An example of this is the recent OECA analysis of the NPDES majors portion of the Clean Water Act enforcement and compliance assurance program. The report, *A Pilot for Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program*, identified patterns of noncompliance and enforcement activity levels from 1999 to 2001. These types of reports allow managers within OECA to improve the program and ensure that the environment and public health are not being compromised. To be successful, we are continually assessing the effectiveness of our program activities to ensure top performance and continuous improvement.

The fifth factor within Smart Enforcement is to communicate the environmental, public health and compliance outcomes of our activities more effectively. This is done, in part, by making information of our program readily available to the public through the internet, publications, and public meetings. An example of making compliance information readily available is the Enforcement and Compliance History Online (ECHO) system. Through the ECHO system the public has facility compliance history right at their finger tips. The system

provides information on compliance inspections conducted by EPA or State/local governments, whether or not violations were detected, what enforcement actions were taken, and whether penalties were assessed.

#### **OECA Review of the NPDES Enforcement Program**

Turning to the specific issue of water enforcement, we are improving upon previous water enforcement programs. In February 2003, OECA developed a report entitled *A Pilot for Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program*. The purpose of this report was to identify patterns of noncompliance and enforcement activity levels from 1999 to 2001. The report analyzed the NPDES majors program, which is only one component of the water enforcement program. Consistent with the principles of Smart Enforcement, this report is being used as an internal tool to provide us with information that will help us better manage the NPDES majors program. The analysis provided OECA managers with an opportunity to strategically develop recommendations designed to improve the NPDES majors program.

The report showed that of the 25% of NPDES majors that were in significant noncompliance ("SNC") during the study period, 48% of those were effluent-related, 36% were reporting violations, and 14% were compliance schedule violations. Additionally, EPA generated SNC rates and recidivism rates are often higher than State generated rates because of variability in how States treat facilities where an action has already occurred. SNC is defined as toxic discharge exceedances of over 20 percent and conventional discharge exceedances of over 40 percent for at least 2 out of the previous 6 months, or failure to meet certain deadlines or

fulfill reporting requirements. The SNC rate remained relatively steady at around 25% between 1994 and 2001. The SNC rate in 2002 was 20%.

Data shows an 11% nationwide decrease in State and EPA formal actions against NPDES majors (Administrative Orders, Administrative Penalty Orders and Judicial Actions) during the study period 1999-2001. This includes a 45% decrease in EPA formal actions likely due to shifts in resources to areas that OECA considers higher enforcement priorities, such as reducing and eliminating violations associated with wet weather events. This also includes a nine percent *increase* in state formal enforcement actions. States account for close to 75% of all enforcement actions for NPDES Majors, so the nine percent increase at the State level is encouraging. As noted above, it is important to keep in mind that the SNC rate has remained steady over the past seven years.

It is important to bear in mind that not all facilities designated in SNC require a formal action to return to compliance. EPA's enforcement guidance and policy identify two ways to resolve SNC: 1) facility returns to compliance on their own in a timely manner, or 2) formal enforcement action. Data show that 49% of facilities recover from SNC without formal action. Some facilities in SNC have pending investigations and enforcement actions which are confidential and are not reflected in the databases. Additionally, informal actions (such as dialog between the facility representatives and government officials to identify problems) and compliance assistance and incentives can be provided to return some SNC violators to compliance.

Our report also analyzed penalty data. It is important to note that States are not required to submit penalty data to EPA, therefore the penalty amounts used in the study are not complete or representative and are not adequate for measuring State performance. However, OECA

decided to look at the data that was available and included it in the report with limitations clearly stated, partly to glean any potentially useful information from the data but also as an incentive to improve data quality. The limited data indicate that penalties are generally modest, averaging around \$5,000 - \$6,000. They also suggest that between 39% - 44% of EPA and State formal actions result in penalties. OECA is committed to focusing on the escalation of enforcement actions over time as well as penalties issued when reviewing regional and State performance and will encourage States to report penalty data prior to implementation of the modernized PCS system. We expect that the modernized PCS system will incorporate State reporting of penalties.

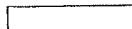
While all of these number may be useful for different purposes, they are not the sole measure to assess in determining the success of an enforcement program. Numbers tell different stories depending on how they are viewed. From FY 2001 to FY 2002, the water enforcement program had the following increases in outputs:

- ! 741% increase in judicial and administrative injunctive relief;
- ! 258% increase in the value of supplemental environmental projects ("SEPs") that will be performed by defendants;
- ! 21% increase in administrative compliance orders;
- ! 20% increase in administrative penalty order complaints.

FY2003 numbers are currently being reported and are not yet available for public consumption.

#### **Implementation of Corrective Measures within the NPDES Enforcement Program**

The NPDES report was an internal management tool and has led to changes in the program. The analysis produced 13 recommendations intended to improve the NPDES majors enforcement and compliance assurance program. Some of the recommendations are already



incorporated into the program and others are being implemented. OECA is actively taking steps to reduce significant noncompliance in the NPDES majors and other programs through improved targeting, public access and enforcement. The following are examples of some recent efforts:

Targeting: Among the recommendations in the report is a recommendation to target SNCs with the worst compliance records and those which have not received effective enforcement. The goal is to ensure timely and appropriate responses to significant noncompliers or longstanding violators, especially those where potential environmental impacts are the most significant. OECA has already made significant progress with this through an effort to develop media-specific Facility Watch Lists.

The Facility Watch List is a management tool that enhances the enforcement program's ability to identify and track facilities with serious violations and no apparent formal enforcement response under the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. The goal of the Facility Watch List is to ensure the timely and appropriate response to significant noncompliers or longstanding violators through better data analysis and routine discussions between OECA, the Regions, and the States. Placing management attention on serious violators that have not received enforcement attention will ensure that these violations are properly addressed, and will significantly reduce the number of facilities that do not receive timely and appropriate action (leading to a diminishing Watch List in the future).

Public Access: OECA has increased public access to enforcement and compliance data through its online Enforcement and Compliance History Online (ECHO) data base. Making data available to the public increases accountability for facilities and encourages compliance. ECHO provides the public SNC data and further demonstrates EPA's commitment to use data to manage the program and focus on facilities identified with serious violations.

Enforcement: EPA and the States continue to enforce the Clean Water Act, while evaluating how best to direct limited resources to address and correct violations causing significant environmental and human health threats.

It is important to keep in mind that in assessing any enforcement program, we cannot only look at total numbers (or beans collected) but consider the entire picture. On the National scale, the water enforcement program has accomplished, and is implementing, major milestones in protecting our waterways. When we look at the enforcement program from the Smart Enforcement perspective, we are on the right track to improving our environment and protecting public health. In particular, when assessing the Federal NPDES enforcement program, today's water enforcement program is responsible for obtaining approximately \$2.8 billion in injunctive relief in FY2001 and FY2002. This is an enormous amount of money that will be invested in environmental controls and will be used to directly improve our waterways. The \$2.8 billion is a substantial increase from the \$1.2 billion in injunctive relief obtained in FY1999 and FY2000. Furthermore, in FY 2001 and FY 2002, the water enforcement program is responsible for removing 865,000,000 pounds of pollution from the Waters of the United States.

#### **Commitment to Increasing Resources and Modernize Enforcement Tools**

The Administration is committed to providing the resources necessary to maintain a vigorous and effective enforcement program that will encourage and ensure compliance with our nation's environmental laws. For FY 04, the President has requested \$503 million for the enforcement and compliance assurance program at EPA, the highest level ever requested and a \$21 million increase over the prior year's request. Included under the President's request is a \$5 million investment to expand and modernize the Permit Compliance System (PCS), the chief

information management system used by the Agency and States to manage the Clean Water Act NPDES program. PCS allows the water enforcement program to identify possible violations and other compliance problems by accessing data submitted required by NPDES permits. The President's request also includes a budget of 3,411 full time equivalents (FTE) to implement the Agency's environmental enforcement program. This represents an increase of 100 FTE over the President's FY 03 request.

**Wet Weather Enforcement Activities**

A major initiative within OECA is to reduce, where possible, the discharge of raw sewage from municipalities during wet weather events through enforcement actions against municipalities that discharge such pollution. Sewer overflows that result in the discharge of raw or diluted sewage from the municipal collection system may pose significant public health and environmental risks.

In the NPDES Performance Analysis issued in February 2003, OECA analyzed, in part, formal enforcement actions related to NPDES majors facilities. The data showed an overall 11% decrease in total State and EPA formal enforcement actions, with a 9% increase for States and a 45% decrease for EPA. The decrease in EPA formal enforcement is due to shifts in resources to OECA's wet weather priority area, which includes combined sewer overflows (CSOs), sanitary sewer overflows (SSOs), storm water, and concentrated animal feeding operations (CAFOs). EPA made wet weather a priority enforcement area because States have indicated that sources of pollution such as storm water runoff, agricultural runoff, and municipal CSO and SSO discharges are having a significant impact on impaired waterways.

Pursuing wet weather cases are more complex, however, than traditional NPDES cases. The case development process, negotiation process, and post-settlement oversight in the wet



weather area are much more complex than in traditional NPDES cases. Although these cases can demand more resources, EPA has taken about 200 SSO and CSO formal enforcement actions since 1995. The Regions have issued over 135 administrative orders and several administrative penalty orders in this time period to address CSO and SSO violations.

Moreover, wet weather enforcement involves a more lengthy and complex process. Unlike the 6,000 NPDES permitted majors whose location and compliance status is tracked in PCS through self-reported data, many of the wet weather sources (e.g., SSOs, CAFOs, and storm water) do not have NPDES permits, are not required to submit self-monitoring reports, and have no information in PCS. As a result, identifying and documenting violators and specific violations for wet weather case development involves more extensive field work and case development. Finally, due to the complexity and length of implementation for many of the requirements in enforcement orders associated with CSOs and SSOs, enforcement resources continue to be expended post-settlement to ensure that the remedy is implemented correctly and on time.

#### **Examples of Recent Cases**

In June 2003, EPA announced a settlement with Washington D.C. Water and Sewer Authority (WASA), launching an extensive program to reduce illegal discharges of untreated sewage into the Anacostia and Potomac Rivers and Rock Creek. Pursuant to the settlement agreement, WASA will take several interim measures to reduce illegal sewage overflows and other violations of the Clean Water Act. The settlement also requires WASA to pay a \$250,000 penalty for past violations, and undertake or fund \$2 million in storm water pollution prevention projects.

In February 2002, we filed a judicial complaint against the Puerto Rico Aqueduct and Sewer Authority (PRASA) to remedy alleged unlawful discharges of untreated sewage into the environment of Puerto Rico and violations of its pollutant discharge permits issued by EPA under the Clean Water Act. We alleged that PRASA is responsible for discharges of raw sewage and other pollutants into Puerto Rico's waterways from 471 pump stations throughout the island, and that it had failed to properly operate and maintain the pump stations, among other violations. In March of 2003, we announced a settlement of that lawsuit that requires PRASA to complete construction and take other remedial actions to eliminate long-standing noncompliance at 185 sewage pump stations valued at approximately \$8 million. PRASA will also develop and implement a comprehensive plan for the operation and maintenance of PRASA's entire system of more than 600 pump stations, and implement a system-wide spill response and cleanup plan. EPA has estimated the value of these required projects at over \$300 million.

In April 2003, EPA announced yet another settlement with the City of Toledo, Ohio to address problems from CSOs and SSOs. The settlement requires the City of Toledo to end its long-standing practice of discharging raw sewage into Swan Creek and the Maumee and Ottawa Rivers. Under the settlement, Toledo will more than double its sewage treatment capacity, build a basin to hold excess sewage and improve their collection and treatment system. These activities, to be carried out under Federal and State supervision, should eliminate most of the raw sewage discharges from the City's treatment plant and sewers, even during peak flow times.

In September 2003, EPA announced a settlement with Bradford Sanitary Authority in McKean County, Pa. This will help prevent untreated sewage from being discharged into Tunungwant Creek and reduce the threat of contamination from abandoned oil and gas wells

nearby. EPA estimates that the corrective actions required by the agreement will reduce dangerous sewage overflows by approximately 5.1 million gallons per year.

As evidence of our continued diligence in protecting our waterways, just last week, EPA made public a draft settlement agreement with Hamilton County, Ohio. Under the agreement, if finalized, Hamilton County will be required to implement remedial measures addressing SSO and CSO violations, as well as the wastewater treatment plant violations. The agreement calls for the implementation of approximately \$1.5 billion of construction activities to eliminate and reduce CSOs and SSOs. A reduction of greater than 85% is expected in the 6.2 billion gallons of highly diluted sewage that are annually discharged from the CSOs during wet weather. The settlement is also projected to result in the elimination of 100 million gallons of raw sewage overflows annually at 16 SSOs.

Other public actions taken in 2003 to address CSOs and SSOs include:

- ! continued litigation against the City of Los Angeles to address sewer spill incidents since 1994;
- ! filing of a judicial complaint against the City of San Diego for its sewage spills and illegal discharges to waters; and
- ! monitoring compliance and implementation of past settlement agreements.

I am extremely proud of the environmental results achieved via these settlements and enforcement activities. The environmental results achieved by our work in the wet weather arena are critical to protect the environment and mitigate the possible public health risks. These efforts are well worth the time and energy that EPA is devoting to this aspect of the water enforcement program.

Region 1 has been a leader in the Nation in addressing wet weather issues through its innovated water enforcement program. My colleague, Robert Varney, will address the accomplishments in Region 1's program to improve the water quality throughout New England.

#### **Other Water Enforcement Priorities**

Even though CSO and SSO issues are a high priority for EPA's water enforcement program, other core programs are continuing to be implemented effectively. On the EPA Headquarters level, we are working with our Regional offices to implement a comprehensive approach to controlling waterway impairment caused by storm water runoff. The 1987 Amendments to the CWA established phased NPDES permit requirements for municipal and industrial storm water discharges. The total number of storm water dischargers is unknown but expected to be several hundred thousand. Storm water run-off poses a significant threat to the environment, and remains a leading cause of water quality impairment.

EPA developed the *2003 Storm Water Compliance and Enforcement Strategy* to address continued non-compliance across the country. The *Strategy* provides sector- and watershed-based models for EPA Regions and States to use as they implement their own enforcement and compliance plans. Furthermore, EPA conducts targeted investigations of many large-scale construction operations, including national developers of large residential and commercial complexes. To address small business violators, EPA recently-developed an expedited settlement offer program that allows the EPA Regions to return small violators to compliance and resolve violations expeditiously.

In light of these activities, EPA continues to maintain an effective water enforcement program throughout the United States. I have provided an overview of our accomplishments, but

this is only the tip of the iceberg. So much else happens in our Regional Offices and other enforcement programs that further our mission to protect the environment and public health.

**Conclusion**

Under the banner of Smart Enforcement, we are measuring the success of the enforcement program through the eyes of the environment and public health. As with any major National program, there is always room for improvement and or modification. I will continue to implement the Smart Enforcement approach and continue to conduct reports similar to the *Pilot for Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program*. This is the only way that we will continue to improve upon our successes.

Thank you for the opportunity to testify today. I look forward to working with you as we continue to promote water enforcement activities with EPA. I am very proud of our accomplishments in improving water quality for all Americans. These efforts are essential in protecting the environment and addressing possible public health risks.

I look forward to responding to any questions you might have.

Mr. OSE. For those in the audience, I'd like to repeat, copies of the testimony of all witnesses are in the back of the room so you can follow along.

You'll find in our format here that in the 5 minutes allotted the witnesses are summarizing their testimony. For instance, Mr. Suarez' testimony is actually about 14 pages long, and it contains a lot of information that he's not able to cover in the first 5 minutes.

So, for those of you interested in the back of the room, there are copies of every witness's testimony.

Our next witness is a Regional Administrator here in Region 1 for USEPA.

Mr. Varney, you're recognized for 5 minutes.

**STATEMENT OF ROBERT W. VARNEY, REGIONAL ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY**

Mr. VARNEY. Thank you.

Mr. Chairman and Congressman Tierney, it's a pleasure to be here, and to be in the area where I grew up and learned to appreciate the natural resources that are so important to us in this country.

By way of background, prior to becoming a regional administrator, I served as the State environmental commissioner in New Hampshire under three different Governors of both political parties.

I was president of the Environmental Council of the States [ECOS]; and, you'll be hearing from the chair of the enforcement committee on the next panel.

I also chaired the New England Interstate Water Pollution Control Commission and chaired the Gulf of Maine Council on the Marine Environment. So, water quality has been an area that I've been very interested in, directly involved in. I have very much appreciated the work that EPA has done over the years in partnership with the States.

As J.P. said—and I want to commend J.P. for his work as the Assistant Administrator—we have been a very focused agency in terms of trying to promote smart enforcement.

We know we have limited resources, we know that there are competing demands in Congress for those resources, and we know that we need to get the very most out of our resources wherever possible.

It's imperative that we direct our resources to areas where there are the greatest risks to human health and the environment.

For us here in Region 1, we have focused on both compliance activities that are enforcement-related as well as compliance activities that are technical-assistance-related. We have worked very closely with the States because obviously the States are an important piece of the picture, and we share our environmental management responsibilities with the States.

We have quarterly meetings with the States to discuss enforcement priorities, to share information, to make sure that we're not duplicating our efforts, and to make sure that we're getting the biggest bang for the buck environmentally by focusing and sharing that information.

We also have performance partnership grants and performance partnership agreements with the States, which again are joint priority-setting with the States to ensure that we're all focused on the right things.

The issues in New England are of significant interest to us. Wet-weather issues, combined sewer overflows, sanitary-sewer overflows and stormwater discharges are significant here in New England.

We all know that our CSOs, SSOs and stormwater issues are related to the urban infrastructure that we have, the age of that infrastructure, and the highly populated villages and urban areas that we have—all of which have an effect on water quality.

In this area, I think it's important to note the significance of shellfish here in Ipswich, where we have the Ipswich Shellfish Co.

We are concerned about bacteria, and how bacteria and other pollutants can affect our shellfish industry, as well as the beaches—another important part of our economy in this part of the region.

We have worked very closely with our municipalities on these issues. About 70 percent of our CSO issues are municipal discharges.

All told, we have a relatively large number of CSO communities, about 120 affecting our beaches, affecting our shellfish beds. Also, let's not forget our drinking water in our rivers and streams.

We try to be results-oriented and flexible in the work that we do.

We have tried, for example, to be focused on enforcement, but at the same time to achieve our results by being flexible and providing communities an opportunity to re-examine issues and to look for cost savings and efficiency wherever we can.

Our efforts are very resource-intensive, and involve a great deal of outreach as well as technical engineering work. Our work on the Charles River, the Clean Charles 2005 initiative, I think is a great example, that you'll be hearing about more.

Our College and University initiative, and our Municipal Department of Public Works initiative, are both programs that promote environmental management systems and self-audits as a way to help us increase our compliance rates and activities. To combine compliance with that technical assistance gives us the greatest benefit to the public and enables us to use our resources most efficiently.

Thank you.

Mr. OSE. Thank you, Mr. Varney.

[The prepared statement of Mr. Varney follows:]

**Statement of  
Robert W. Varney  
Regional Administrator  
U.S. Environmental Protection Agency  
New England Region**

**Before the Subcommittee on  
Energy Policy, Natural Resources and Regulatory Affairs  
Committee on Government Reform  
U.S. House of Representatives**

**October 14, 2003**

Good morning Mr. Chairman and members of the Subcommittee. I am Robert W. Varney, the Regional Administrator of the Environmental Protection Agency's New England Office, Region I. I appreciate the opportunity to discuss with you EPA's enforcement and compliance program here in New England. My remarks will focus primarily on our work ensuring compliance with the Clean Water Act and the results we are achieving. I will also touch on our use of integrated strategies - combining assistance, auditing, incentives and enforcement - to achieve greater levels of compliance across all the environmental statutes.

**Clean Water Act Compliance Challenges in New England**

The most significant environmental and public health challenges that we face in New England under the Clean Water Act remain in the area commonly referred to as "wet weather." From combined sewer overflows (CSOs) to sanitary sewer overflows (SSOs) to storm water, discharges following rain events are reportedly a significant cause of stream and river impairment and beach and shell fishing closures across New England. For these reasons, the Region has devoted substantial enforcement effort to addressing these violations.

CSO and SSO cases can be very resource-intensive to develop, litigate and resolve. This is due to a number of factors. Necessary injunctive relief can be complex, requiring expenditure



by municipalities of many millions of dollars. In addition, enforcement actions routinely require submission of numerous engineering reports to EPA and states requiring technical review. As a result, although Region I and the New England states have made substantial progress in the area of CSOs and SSOs, much additional work needs to be done.

The Region prioritizes wet weather work – particularly CSO and SSO cases – above some of the other types of violations tracked in EPA’s national “Significant Non-Compliance” or “SNC” rates. In the Region’s experience, the environmental problems caused by some wet weather violations in New England have posed greater risks to the environment than some of the traditional SNC cases. This is due to weather patterns in New England, as well as the fact that New England has old, urban areas with aging infrastructure. We recognize that in other areas of the country, different issues may pose more serious environmental problems. The Region’s approach has been to evaluate continually both SNC and wet weather violations and to focus our resources on those violations where environmental impact is the most significant on the residents and resources of New England.

#### **Work to Address CSOs**

Combined sewer systems (CSSs) are remnants of the country’s early infrastructure found in the Region’s older cities and towns. As New England has some of the oldest communities in the country, it also has a relatively high number of communities serviced by CSSs. More specifically, there are approximately 120 CSO communities in New England; these systems have a total of over 990 outfalls.<sup>1</sup>

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<sup>1</sup>The number of CSO communities and outfalls are subject to change as communities progress with CSO control projects. With regard to the number of outfalls, the Region considers

As a result of efforts by Region I and the New England states, nearly every New England CSO municipality is implementing system management controls and all significant dischargers are either planning, implementing or have completed CSO mitigation. A CSS may include as few as one outfall to more than one hundred outfalls. The Region and the states have focused enforcement on the more complex problems. Of the 120 CSO communities in New England, over 80 have been addressed by an administrative or judicial enforcement action. The Region has taken the lead in 26 of these actions; the states have handled the others. As a result, these enforcement actions are addressing more than 80% of the CSO outfalls in the Region. Most CSO communities that are not subject to enforcement are addressing CSOs informally by separating their CSSs into distinct sanitary and storm lines.

In FY02, for example, the Region issued enforcement actions requiring the preparation or implementation of long-term controls plans which have resulted, or will result, in significant reductions in the frequency and levels of CSOs to surface water. This work included issuance of administrative orders to the following communities: Fitchburg, Massachusetts; Haverhill, Massachusetts; Greater Lawrence Sanitary District, Massachusetts; Lowell, Massachusetts; Springfield, Massachusetts; Worcester, Massachusetts; Manchester, New Hampshire; and Portsmouth, New Hampshire.

CSO cases continue to involve EPA oversight and involvement for years after the enforcement action is issued. In addition to issuing new actions in 2002, for example, Regional staff also were involved in reviewing and commenting on long-term control plans or other deliverables required by orders or consent decrees from the following communities: Chicopee,

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outfalls as existing until permanently capped or otherwise eliminated.

Massachusetts; Gloucester, Massachusetts; Greater Lawrence Sanitary District, Massachusetts; Haverhill, Massachusetts; Lowell, Massachusetts; Massachusetts Water Resources Authority, Massachusetts; Portsmouth, New Hampshire; and Nashua, New Hampshire. These reviews involve complex engineering solutions to environmental problems that will result in significant expenditures by municipalities and sewer authorities.

In its application of the National Combined Sewer Overflow Policy, the Region strives to implement a results-oriented, flexible approach. For instance, the Region does not mandate a preferred set of technologies that a municipality should use to address CSO issues. Rather, through its enforcement actions, the Region allows a community to develop abatement programs tailored to its individual circumstances. Provided that communities are making solid progress within time frames the Region agrees make sense, the Region allows communities to select the most appropriate resolution to CSO problems from a variety of approaches. The Region also recognizes that a community's knowledge about its sewer system often develops through the course of abatement work. This is due not only to the fact that collection systems are underground and therefore not readily observed, but also because the systems in New England are old and historical mapping is often unavailable. As a result, the Region often phases work required under CSO enforcement actions so that communities can build upon knowledge gained about their systems during initial stages. The Region is amenable to communities recommending modifications to abatement plans based on new information as long as equivalent or better environmental protections are guaranteed.

A recent example of the Region's approach regarding CSO enforcement is with Nashua, New Hampshire. Pursuant to an administrative order issued in 1999, Nashua began to

completely separate its CSS. While undertaking this work, the City also engaged a consultant to re-evaluate its CSO abatement plan. In 2003, Nashua submitted an alternative CSO control plan which proposed construction of storage and treatment facilities that would capture and/or treat not only sanitary sewage but also storm water run-off. Under complete separation, all of the storm water would have been discharged to surface waters. The plan predicted that the projects would control wet weather combined flows for up to the two-year storm at all but one outfall where Nashua would provide treatment for flows up to the largest storm in a typical year. EPA and New Hampshire agreed that the plan was a good first step. Accordingly, EPA issued a new order requiring implementation of these projects in lieu of complete separation. After the recommended projects are implemented, monitoring will be necessary to evaluate the level of CSO control achieved and to determine appropriate next steps.

#### **Work to Address SSOs**

Overflows of sewage from separate sanitary systems also are a Regional enforcement priority. New England communities serviced by separate sanitary sewer systems may also experience unauthorized overflows of untreated or partially-treated sewage as a result of inadequate maintenance of aging sewer systems or insufficient capacity.

Historically, the Region has taken civil judicial enforcement actions against municipalities with chronic SSO problems. Recent actions included the following:

- \$ Greenwich, Connecticut. Judicial consent decree provides for payment of \$285,000 in civil penalties and injunctive relief.
- \$ Winchendon, Massachusetts. Judicial consent decree provides for payment of \$45,000 in civil penalties and injunctive relief.
- \$ Waterbury, Connecticut. Judicial consent decree provides for payment of \$300,000 in

civil penalties and injunctive relief.

The Region worked closely with the State of Connecticut and the Commonwealth of Massachusetts in developing these actions. Connecticut and Massachusetts joined each of the actions as co-plaintiff.

#### **Work to Address Pollutants in Storm Water**

Storm water is an area in which the Region has worked to integrate compliance assistance and enforcement. Several years ago, the Region initiated enforcement focusing on violations of the "Phase 1" storm water rules by industries and developers. These enforcement efforts have continued. In FY02 and FY03, for instance, the Region resolved four administrative penalty actions against developers and one judicial action against a sand and gravel company. The enforcement actions included the following:

- § V&G Building Development Corporation: This action involved a 164-acre residential development in Methuen, Massachusetts. The settlement required payment of a \$50,000 penalty.
- § Mesiti Development Corporation: This action involved a 112-acre residential development in Salem, New Hampshire. The settlement required payment of a \$75,000 penalty.
- § Lowes Corporation. This action involved Lowes' sites in Woburn, Danvers, Brockton and East Springfield, Massachusetts. The settlement required payment of a \$137,500 penalty.
- § Bestech, Inc., et al. This action involved a commercial development in Chicopee, Massachusetts. The settlement required payment of a \$42,000 penalty.

§ Boston Sand & Gravel, Boston, Massachusetts. The Region brought a civil judicial action against Boston Sand & Gravel for violations of industrial storm water requirements at several facilities in the Boston area. The consent decree required payment of a \$898,000 penalty and a \$500,000 supplemental environmental project that will eliminate discharges of process water from one of the company's facilities.

Based on our experience enforcing the Phase 1 requirements and recognizing that Phase 2 would regulate for the first time hundreds of municipalities and small construction projects, the Region decided to launch an extensive program of outreach and assistance prior to the effective date of the Phase 2 regulations. Regional staff reached hundreds of affected sources through workshops, fact sheets, mass mailings, and other forms of communication to those regulated by these new and expanded requirements. Through this outreach, we aim to increase our target audiences' awareness of EPA's role in storm water permitting, the relationship between the federal program and other state and local storm water programs, and why controlling storm water impacts is environmentally important.

Our assistance work has primarily been focused in New Hampshire and Massachusetts, the two New England states that are not authorized to administer the NPDES program. The Region also has cooperative relationships with the other four New England states. Our assistance is focused on those most affected by these new requirements, especially:

§ ***Small MS4s (municipal separate storm sewer systems) that need to develop programs.***

Approximately 300 communities in MA and NH, where EPA NE is the permitting authority, needed to apply for permit coverage by July 31, 2003, and to develop storm water management programs over the term of the permit. We have already determined that 90% of regulated MS4s filed applications by the deadline; such a high compliance

rate can certainly be partly attributed to outreach.

- § ***Small municipal and private construction projects that need to control construction runoff.*** Previously, the regulations applied to projects affecting more than 5 acres; the Phase 2 rules lowered the regulatory threshold to projects affecting more than one acre, making many more construction projects subject to these requirements. The permit issued pursuant to these new rules became effective July 1, 2003 in New Hampshire and August 4, 2003 in Massachusetts.
- § ***Municipal, state, and federal governments that must control runoff from their “industrial” facilities.*** “Industrial” operations owned by governments, like municipal wastewater treatment plants and transfer stations, were required to apply for coverage or seek a “No Exposure” exemption by March 10, 2003.

Examples of the kinds of work we have done for these groups include: the creation and distribution of a model storm water plan for wastewater plants; workshops for wastewater treatment plants, highway garages and the construction sector; publication of articles in trade journals for the construction industry; development of materials to help contractors and developers determine which state and federal storm water permits they require; gathering and packaging storm water data to three low-income communities (Lawrence, Holyoke and Chicopee, Massachusetts) to help them implement programs designed to detect unauthorized connections of sanitary pipes to municipals storm sewers and establishing a “virtual trade show” of innovative storm water management technologies on our regional web site.

As the Phase 2 requirements come into effect, the Region will turn to enforcement of the

rules. We also will continue to enforce the Phase 1 requirements.

#### **Clean Charles 2005 Initiative**

In the Charles River basin, we have pioneered a results-oriented approach that combines our experience in the areas of CSOs and storm water. The Charles River is a symbol of Boston and is used by many thousands of people, but the quality of its water has been badly degraded. In 1995, EPA set a goal of making the lower Charles River fishable and swimmable by Earth Day 2005, and we have measured our progress on a monthly basis since. When the initiative started, the River met bacterial standards for swimming and boating just 19 and 39% of the time. It is now meeting those standards roughly 40 and 90% of the time. We have eliminated a wide range of pollution sources using a broad assortment of tools.

Enforcement has played a key role in this effort. For example, we took a series of enforcement actions to address illicit sewage discharges into storm drains. These actions have stopped the discharge of more than one million gallons of sewage per day into the River. We are also using enforcement to deal with combined sewer overflows from Boston and Cambridge. As a result of CSO enforcement, sewage loads to the lower Charles have been reduced from 1.7 billion gallons a year in 1988 to one tenth that amount in 2002.

While enforcement has been at the core of our strategy, we have also provided compliance assistance and built partnerships with local activists, municipalities, industry, and environmental groups. Some problems can be addressed more effectively through such partnerships, or through a combination of enforcement and compliance assistance. For example, a local citizen regularly kayaks the river and reports illicit discharges, otherwise difficult to detect, to EPA. MIT, a partner in our effort, hosted a storm water control design contest and constructed the winning design, bringing attention to simple steps that can be taken by



individuals in an urban setting to improve water quality. We encouraged the local municipalities to develop state of the art storm water management plans by providing the services of an expert consultant. And we are using innovative approaches to enhance the impact of our enforcement efforts. For example, by publicizing a Charles River inspection sweep two months before it was conducted, we generated a dramatic surge of compliance activity at hundreds of facilities – far more than we could have ever inspected.

Our Charles River work is driven by the need to produce real environmental results. We continually monitor water quality data, and adjust course as necessary based on trends in that data. This results-focused, multi-tool approach – integrating enforcement with other tools to achieve the best environmental result – has been adopted in other watersheds across the country.

#### **Boston Harbor Cleanup**

The Region's enforcement efforts related to water pollution in Boston Harbor reflect the Region's commitment to using traditional enforcement tools where necessary to resolve significant environmental problems. The Region's involvement in the Boston Harbor litigation did not end with the construction of the Deer Island wastewater treatment plant. The case, initiated in 1985, resulted in the Massachusetts Water Resources Authority (MWRA) spending \$4.5 billion dollars to bring the MWRA closer to compliance with the Clean Water Act. Approximately \$4 billion has been spent on the treatment plant and a 9.5 mile effluent tunnel. Prior to the new plant, the Metropolitan District Commission operated a primary plant, but then dumped the sludge back into the harbor.

The results have been significant:

- X During dry weather, the Boston metropolitan sewer system is no longer the largest source

of contaminants in Boston Harbor.

- X The amount of solids discharged has decreased by 80%.
- X Most of Boston's outer harbor now meets water quality standards for bacteria. Boston's beaches are now safe for swimming between 86% and 96% of the time.
- X Levels of lead and other heavy metals in sediments are now roughly half of what they were 20 years ago.
- X Fish and other wildlife populations are now healthier.

The MWRA will spend more than \$600 million on combined sewer overflows (CSOs).

In the late 1980s, there were 88 CSOs discharging 3.5 billion gallons of untreated mixture of sewage and stormwater annually. By 2008, the MWRA intends to close 36 outfalls, eliminate the discharge of 3.1 billion gallons of untreated wastewater, and treat 95% of the remaining flow.

Achievements include:

- X Shell fishing, on a "conditional" basis, is now permitted along the South Boston and Dorchester shorelines. Previously, these areas were considered "prohibited" and the goal is "unrestricted."
- X For the last three years, the City of Boston has hosted a national triathlon on Labor Day weekend with the swim portion in the Inner Harbor near the World Trade Center.
- X The once forgotten Fort Point Channel has recently become a focus of residential and business groups as an area to be developed for recreational, arts, and commercial development for both residents and as a tourist attraction.

#### **Assistance Work & Integrated Strategies**

In addition to its traditional enforcement role, EPA's work in New England focuses on

practical problem-solving strategies that incorporate all of our tools and resources. Enforcement is one of these tools, as is assistance. Our goal is to develop strategies integrating our compliance assistance and enforcement programs to yield maximum environmental impact. This is an application of what my colleague JP Suarez refers to as Smart Enforcement. To accomplish this, we have developed a unique organization in this Region that is proving to be a model for others. This model is found in our regional Office of Environmental Stewardship which consolidates the efforts of our Enforcement and Pollution Prevention Offices. While separate from each other, these two Offices also work closely together to develop strategies that integrate enforcement and assistance approaches. We've found that this combination of "carrots and sticks" can be very effective. Two examples of the Region's integrated strategy approach include the College and University Initiative and the Department of Public Works Initiative.

There are significant reasons for concern about compliance at Colleges and Universities (C/Us). Most colleges and universities are analogues of small cities encompassing myriad activities within their campus borders. These activities include operating research laboratories, medical facilities, auto repair facilities, power plants, wastewater treatment plants, disposing of hazardous and solid wastes, supplying drinking water and maintaining campus grounds. Thus, colleges and universities must grapple with a wide range of environmental issues to protect the health of their communities and comply with the law. However, unlike the typical municipality, most have no central authority coordinating environmental practices.

In 1999, to help colleges and universities address the problems that we were finding through inspections and enforcement activities, the Region designed a phased strategy

integrating its ongoing enforcement activities with a program providing assistance to the college and university community. The Region sponsored multimedia workshops focusing on compliance issues that colleges and universities face daily. At the workshops, EPA highlighted specific historical problems that this sector has encountered, and been cited for, in enforcement inspections. We went on to create a website specifically tailored to the needs of the sector. The web page tracks EPA's objectives for all program phases. It allows colleges and universities to search for information tailored to their assistance needs -- from basic regulatory compliance to best management practices to sustainability concepts. In August 2003 alone, we had over 10,000 hits on our C/U web site. Our work also goes beyond compliance, and we are now working with many campuses on development of Environmental Management Systems, web-based assistance tools, energy efficiency and waste reduction programs, and, most recently, homeland security methods. Many of these efforts are documented on our web site as "best management practices."

Perhaps the most significant aspect of our C/U initiative was the Self-Audit Initiative. Under this program, we invited C/Us to voluntarily discover, disclose, and correct violations. In return, EPA eliminates or substantially reduces fines for violations that were disclosed or corrected during the audit. EPA added an extra incentive for facilities that participated in the initiative -- giving them a low inspection priority status for a set period of time. Out of a total of 331 C/U facilities in New England, 176 participated. This strategy maximized voluntary compliance in the Region using a relatively small investment of resources. We do not believe we would have gotten this rate of participation or compliance without the integration of both our enforcement and assistance activities.

We have a similar strategy for municipal Departments of Public Works (DPWs). There are 1500 DPWs in New England, and many are in serious noncompliance with environmental

laws. Our inspections of these facilities have revealed improper handling and storage of hazardous wastes, storm water violations and unpermitted discharges of wastewater to ponds and streams. Launched after several highly publicized enforcement actions against municipal highway garages, this initiative was created to help municipalities comply with environmental requirements by also offering them greatly reduced penalties and low inspection priority. More than 320 facilities participated, conducted self-audits and corrected significant numbers of violations. This response far exceeded our expectations. As with colleges and universities, we believe both enforcement and assistance were needed to make this effort so successful.

**Sector Based Strategy: Marinas**

Marinas are a sector with obvious potential to impact surface water sources. We have initially approached this sector with assistance tools. In New England, more than 1,000 marinas repair, store, maintain and fuel water craft. These activities can present a number of significant environmental issues, including point and non-point source pollution from storm water contaminated by marina operations; spills and emissions from fuel and oil; and generation of hazardous waste from paints, solvents, degreasers, oils, and fuels.

Marinas often lack the environmental expertise and resources to achieve high environmental standards. This problem is compounded by the decentralized and fragmented nature of marina regulations. To help remedy this situation we developed an assistance initiative to improve marina environmental compliance and to promote best management practices.

To help evaluate performance under this effort, we developed a statistically-valid measurement approach, featuring on-site marina assessment surveys that measure key environmental compliance requirements and desired best management practices. The initial

baseline measure, which was completed in 2001, confirmed the existence of many problems identified earlier. Some of the work we have done in response includes the following: development of guidance documents to help marinas understand their environmental requirements and implement best management practices; completion of environmental workshops for marina owners in each state; formation of a regional marina workgroup to provide stakeholders a forum for improved communications; and creation of a regional marina website.

In addition, we collaborated with EPA Region 2 and marine industry stakeholders from New England and New York to launch a New England Clean Marine Engine Initiative. As part of this effort, participating organizations agreed to encourage customers to purchase and use lower-pollution marine engines in New England and in the Lake Champlain area. We now have 130 retailers participating in this initiative, and they have reported sales in 2002 of over 1,700 low pollution engines. Using our program as a model, EPA Region 2 has expanded it to New Jersey and Long Island.

Our enforcement office has followed these assistance efforts by conducting inspections at marinas.

### **Conclusion**

We have made tremendous progress in improving the quality of New England's streams, rivers and estuaries over the past thirty years. Still, numerous challenges await us, particularly those related to municipal infrastructure and storm water. We are resolute in setting appropriate environmental and public health targets and moving steadily, though flexibly, towards them. Working in concert with the New England states and municipalities, we will continue to make the kind of progress elsewhere that we have already seen in Boston Harbor and are seeing in the lower Charles River.

This concludes my prepared remarks. I would be happy to address any questions you may have at this time.

Mr. OSE. At this stage, what we will do with our panel of witnesses, Congressman Tierney and I will enter into a dialog with them, with questions. We'll rotate back and forth.

At the end of the hearing, there may be questions that we think of but haven't asked. The record is going to be left open for a couple of days so that we can send those questions to you in writing, and you can respond. Obviously, we would appreciate a timely response.

And I'm going to commence.

Mr. Varney, I'm particularly interested in the issue of wet weather events.

The question relates to the intersection of policy with fiscal conditions of the States with the actual physical process of how sewage and the like is transported to treatment plants.

What steps has Region 1 taken to work with New England's municipal sewer systems to bring them into compliance?

Mr. VARNEY. Well, we've used a multifaceted approach in working with our municipalities.

First and foremost, we have tried to work cooperatively with the municipalities wherever possible. We also have tried to give them realistic timeframes for doing the work that is needed.

An example of that would be many of the CSO communities where we moved ahead to implement the most cost-effective measures that would achieve the greatest reductions at the lowest possible cost, while deferring some of the improvements that were less cost-effective and provided less of an environmental and public health outcome.

Mr. OSE. You've taken data collected by the States, I presume, analyzed it accordingly, and sought to prioritize?

Mr. VARNEY. We would work with the States to prioritize the data. We would discuss the prioritization of the data. We would go through a ranking system, looking at a series of measures.

First and foremost would be the risk to public health, the volume of the discharge, the total quantities involved, and, of course, our measurement of water quality, what we're actually seeing in the rivers, streams, and estuaries over time, which is a reflection of both our compliance activities as well as our enforcement.

Mr. OSE. The States set the level at which compliance is attained; is that correct?

Mr. VARNEY. Water quality standards are set by the States.

Mr. OSE. And the EPA signs off on those at the time the plan is adopted?

Mr. VARNEY. Yes; and, generally speaking we have fairly stringent water quality standards here in New England.

Mr. OSE. Now, there seem to be significant noncompliance issues with a number of municipalities. What's driving that?

Mr. VARNEY. The significant noncompliance [SNC], rates for our region are a reflection of several factors.

One of the most important factors as it relates to SNC is the fact that some of our limits are interim limits, and some of them are seasonal limits; the interim limits are related to the fact that we need several steps to be taken in terms of improvements to get to those numbers.



Then we also have seasonal limits, which are another factor; and the States have chosen to select standards that are fairly difficult to attain, and we have worked with communities over time to move forward on those.

In cases where we have significant impact to public health and the environment, as well as a whole series of other factors that we look at in our prioritization scheme, we would, in conversation with the States, select those items that are the top priority.

Mr. OSE. I didn't quite understand that.

There are 45 of 50 States that are basically self-monitored; two of the remaining five States are New Hampshire and Massachusetts, in terms of administering an NPDES program. Is that correct?

Mr. VARNEY. Yes.

Mr. OSE. Before I leave this point, what are the other three States?

Mr. VARNEY. There are six States in New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

Mr. OSE. All of which rely on EPA for the administration of the NPDES program?

Mr. VARNEY. Yes. We are the ones that actually issue the permits in Massachusetts and in New Hampshire, but do so jointly with the States; as we just recently did on the Brayton Point permit in Somerset, MA.

Mr. OSE. I think it was in your testimony that there was an example cited of a CSO or SSO that was being redesigned for a 2-year storm. How do you determine that the 2-year storm is the threshold to utilize?

Mr. VARNEY. The factors that we would use would be determined in discussion with the State and with the local community, and with the consulting firms that they have on board.

What we would be trying to do is to minimize the number of situations whereby you would have unhealthy levels of bacteria in your river on a frequent basis.

An example of that would be a hot summer day, at say 95 degrees, with elevated levels of bacteria in your waterways due to a rain event the day before.

Obviously, we're trying to minimize and eventually eliminate those discharges through a comprehensive approach, working with the local community over time and within, obviously, the resources that they have to reduce and eventually eliminate those discharges.

And there is no single approach that's used. It's a multifaceted approach, involving stormwater as well as CSO and replacement of some of the aging infrastructure.

Mr. OSE. Mr. Tierney.

Mr. TIERNEY. Thank you, Mr. Chairman.

Mr. Varney, before we leave that subject on the CSOs and the SSOs, you indicated that part of the problem with significant non-compliance was the fact that there were interim and seasonal standards to meet or whatever; but, I suspect what my communities would tell you is that it's money. Have you heard that?

Mr. VARNEY. Yes. I've heard that many times.

Mr. TIERNEY. Basically, what we're talking about is money?

Mr. VARNEY. Absolutely.

Mr. TIERNEY. There was a day when the Federal Government used to participate somewhat significantly with CSO funds and SSO funds and other clean-water issues; and we've seen a retreat from that for a few decades.

What would your impression be if there were ample resources among the State and the Federal Government and the local communities? I think we would be doing a better job, would we not?

Mr. VARNEY. Yes; it would move faster, I would expect.

Mr. TIERNEY. Mr. Suarez, thank you for your testimony here today.

Let me just cover some ground. I promised somebody that called from a radio station this morning that we would try to do this in English, try to break it down. We'll try not to have too much alphabet soup, and try to make it simple.

The permit compliance system you have, the PCS data base, identifies violators from the discharge monitoring reports of the facilities.

So if facilities file discharge monitoring reports to the EPA and to the State, it's sort of a self-monitoring type of situation; am I right?

Mr. SUAREZ. That's correct.

Mr. TIERNEY. With respect to the major facilities, as described by the chairman earlier, the reports include information on what the facility has discharged into the water over a specific period of time.

Mr. SUAREZ. Correct.

Mr. TIERNEY. And, they're required to be filed periodically to either the EPA or the States, depending on who does it; and then they're used to identify where the violations are.

So my question to you is, how helpful are those reports at identifying violators, and are we confident that this self-reporting is accurate and it's working?

Mr. SUAREZ. The discharge monitoring reports that you referred to are incredibly important to us when we evaluate the compliance of a particular facility; and we use those regularly to evaluate the effectiveness of compliance and enforcement efforts across the Nation, through all 50 States.

They are the backbone of the water enforcement program, as far as I'm concerned.

The data quality is good. There are some data-quality issues in a number of States. Some of that is input.

Actually, Mr. Tierney, there are some States that are moving a little bit faster in upgrading their computer systems; and, there's a communication difficulty with EPA's system and the States'.

We have put money and resources into designing what we're calling bridgework. That allows the States to move ahead, and our system will catch up. We're trying to do that as quickly as possible so that the data quality does not suffer and is not compromised as a result of different systems.

But at the end of the day, this administration has asked for more money to upgrade and modernize PCS so that it will be able to communicate with all 50 States. Data quality will be better than it is now, though it is good now.

Mr. TIERNEY. Are you aware of any analyses that have been done concerning the reliability of these discharge monitoring reports, or

do you plan to do any, so we have some sort of data to indicate to us just how much of this self-reporting is accurate and how much is not?

Mr. SUAREZ. I am not specifically aware of any analysis that's been done to go underneath the reports to determine independently whether or not the monitoring is accurate.

Much of this monitoring is a regular, continuous monitoring system that's in place at the facility; so, it's data that is just uploaded and submitted to us.

So again, I think from my perspective what I would focus on is those facilities that are failing to meet the permit limits, failing to meet water quality guidelines and standards, and addressing efforts there; because, we have pretty good confidence in the discharge monitoring reports.

Of course, if there were a concern brought to our attention, since there have been instances where certain people falsify records, we will take appropriate action, and swiftly, against those entities' operators.

Mr. TIERNEY. And we're relying on people to report that has been happening, as opposed to some analysis generally on the accuracy of them?

Mr. SUAREZ. Or we will look at inconsistencies. Let's use an example.

If there is a series of exceedances over a number of months, when the exceedances come back into the permit level we'll engage in a conversation with the States, and ideally with the facility. We'll say, what happened? What would cause you to go from all these exceedances back into compliance?

And if there is any concern that's raised concerning the veracity of those DMRs, we'll take a look.

Mr. TIERNEY. Earlier this morning there was reference to the waterways advocacy groups.

The issue was raised that we all understand you're focusing on the violations of major facilities, but we also have discharges coming from minor facilities as well. What information do we have that's currently available in terms of the minor NPDES facilities and how much they're currently discharging?

Mr. SUAREZ. That data is available publicly; and there are links available on the ECHO Web page, actually, where the public can access that.

Mr. TIERNEY. Will you tell us what ECHO is, again?

Mr. SUAREZ. Yes; I apologize.

That's a system that we put on line last year. It is an enforcement and compliance history online data base that allows the public to access our enforcement history of over 800,000 regulated facilities, and to look at their compliance history, their compliance with their permits—be they air or RCRA or Clean Water Act—and to download that information if they want to, and to do a number of different queries of the data base.

Mr. TIERNEY. And that's the minors as well as the majors?

Mr. SUAREZ. There is information for minors there as well.

Mr. TIERNEY. These facilities that receive permits that allow them to legally discharge certain amounts of effluent—

Mr. SUAREZ. Yes; that's correct.

Mr. TIERNEY [continuing]. Do we know how much pollution is legally emitted into our waterways? Is there any record of that?

Mr. SUAREZ. We have looked at some trends in terms of trying to gauge the amount of the loadings.

I can't tell you today, Mr. Tierney, what that number is; but I'll be happy to go back and see if my staff can give you a better number.

Mr. TIERNEY. Would you do that, please?

Mr. SUAREZ. Yes, I'd be happy to do that.

Mr. TIERNEY. Thank you.

The report that we talked about earlier, the NPDES majors report, is an analysis of one component of your work. I think both of you mentioned that in your testimony. We have other areas.

Do you anticipate that you're going to do the same sort of internal analysis on wet-weather areas; the CSOs, the sanitary-storm overflows and the stormwater?

Mr. SUAREZ. It is my expectation, Mr. Tierney, that we're going to do this type of evaluation for all components of the enforcement program; and the obvious next progression in areas of water enforcement would be areas of wet weather and so forth.

Mr. TIERNEY. Do you have a timetable on that?

Mr. SUAREZ. We're hopefully going to start the next wave of analysis, and to get it into final form. We just started. We hope to get that process underway shortly.

Mr. TIERNEY. How long does a report like that generally take for the department?

Mr. SUAREZ. To give you an example, the NPDES majors performance analysis, I authorized that soon after I was confirmed, which was in August; so I think it was around September I authorized it, in 2002, and in February 2003 it was produced.

It will take some time, because there is significant consultation with the regions and the States to make sure that we get it right, and that we do appropriate analysis.

So it takes a little bit of time; but once we have it in hand we use it. We have been using it since we've gotten it.

Mr. TIERNEY. Now, would you do the other analysis simultaneously, or would you do it progressively?

Mr. SUAREZ. Because of resource limitations, I think we would probably do them serially rather than simultaneously.

Mr. TIERNEY. Now, the report talked about the quality and quantity of some of the data in the report. With respect to the majors, it talked about needing more quality data on compliance incentives, compliance assistance, capacity building, responses to citizen complaints, and outcomes from monitoring.

Do you agree with that assessment, that more work needs to be done there?

Mr. SUAREZ. I do.

Mr. TIERNEY. Can you tell me, if that's the case, what burden then would the regional administrators and the States in fact incur in order to do that kind of work?

Mr. SUAREZ. Yes, Congressman.

One of the most important things that we believe in, that I believe in, is that in order to measure the program we must measure

its effectiveness across all areas; not just the enforcement, but the compliance areas as well.

So, what we are trying to do is to develop systems whereby we can gauge, how effective is compliance; is it changing behavior that results in improved waterways; is it changing processes to result in less emissions being produced as a result of compliance rather than as a result of a traditional enforcement action?

We have an Office of Compliance in our shop that is developing a number of these types of, we'll call them tools, but really protocols, on how you go about measuring compliance assistance.

Once we develop those, we push them out to the regions; and we ask the regions to start working with the States to develop those, to improve those, to make sure that we're capturing that information.

It is a process. I'll tell you that we're in the process now of capturing better outcome measures for traditional enforcement actions, and we're moving into the compliance area. It takes time; but the results, I believe, are something where over time we will see a better measure of how effective our work is.

Mr. TIERNEY. One of the difficulties, I understand, in drawing conclusions on the effects of penalties was the lack of data coming in from any of the States. Is that still the case?

Mr. SUAREZ. The data is not required right now to be input by the States, so it is spotty. We believe that with a modernized PCS system—

Mr. TIERNEY. PCS system, again, being?

Mr. SUAREZ. I'm sorry; permit compliance system—with a modernized permit compliance system that data will be entered into our data bases, and we'll be able to do some critical analysis along the lines suggested in the report.

Mr. TIERNEY. Are you going to require that voluntarily; are you going to change a rule or regulation, or are you going to need legislation to do that?

Mr. SUAREZ. We're going to do it by our guidances in our policies.

Mr. TIERNEY. And you're confident that will get you the information you need?

Mr. SUAREZ. We think so.

Mr. TIERNEY. Now, there was some mention in the report about the effective date for that work being done being postponed. Was that resolved; and when do you expect that to occur?

Mr. SUAREZ. We are currently on schedule to have permit compliance system modernization, the first phase, up and running by December 2005.

The President's budget includes a request for \$5 million, which would keep us on track. We have just completed the detailed design phase, I think it closed on September 30, where we solicited comments from the regions, States and stakeholders about what could be done with our detailed design.

I say that all in background, Congressman, to tell you, assuming that funding continues in place for 2004, 2005, 2006, we think we are on track to meet our deadlines now.

Mr. TIERNEY. I happen to think, and I agree with the chairman, that it's important to know what the effects are of enforcement, of assistance to violators, as well as the penalties. We've got to get

some grip on which is more effective or, used in tandem, how we balance them and move forward on that.

One of the questions that was raised in the report—and again, some of these are tongue-twisters—we were talking about the most extreme exceedances of toxic-water-quality-based permit limits.

We want to know whether or not those exceedances were just the results of lack of a technology that was available, or was it strictly a cost issue, or was it some combination of those. Have you been able to get an answer to that?

Mr. SUAREZ. We're in the process of doing just that, Mr. Tierney.

What we have done has resulted in the report. One of the recommendations in the report was to use the data to help us look at things like toxic exceedances over a certain percentage threshold.

What we have done is we have created a document that will be used to help us manage the program called Watch List. The Watch List has incorporated this type of information where we will identify what we will call the sort of possible facilities that might be a persistent problem.

If it has an exceedance of over 1,000 percent, I can tell you it will be on that list.

The Watch List, then, is not a targeting tool, but rather a management tool whereby we engage the States in conversation about what is the problem. Is it a technology problem, is it a permit-limit problem, or is it a compliance problem at the facility?

Once we make that determination, we then can determine what we need to do to address that problem, to bring that exceedance down to where it needs to be.

The result of those conversations will be some enforcement work. There will be more conversations with the Office of Water about what kinds of permit limits are in for some of these facilities, and what kinds of compliance assistance we need to do to get these facilities to bring the levels back down.

It's going to involve all of that, but it's going to help us manage our information and our program.

Mr. TIERNEY. Are you going to make the Watch List information public?

Mr. SUAREZ. It is not our intent to make it public.

Mr. TIERNEY. Why not?

Mr. SUAREZ. Because it is a management tool. We need to be able to look at that information, evaluate it, and have a reasoned discussion with the States about what the path forward is for some of the facilities on the list, without it being a target list. That's fundamentally not what it is.

We believe there is a vast amount of information available to the public to get a handle on what may be happening or may not be happening at the facilities in their neighborhoods.

Again, I point you back to the enforcement and compliance history online system, which is something we launched in 2002 of last year, November 2002; and it's now final.

We think it is critically important that we be able to have candid and probing discussions with our States. Our concern is that using the data that we have on our Watch List and making that public will force reactions that may not be in the best interests of where we need to put our resources.

Mr. TIERNEY. You think that outweighs the benefits that might be gathered from having the public be aware that an entity is on the Watch List, and having their scrutiny and their observations play a role?

Mr. SUAREZ. I do because, again, the presence of a facility on the Watch List doesn't mean that it is targeted for enforcement action.

I think that would be a concern on our part. I don't want to speak for the States. Mr. Thompson is here, and he can address that. I believe, however, that there will be a concern on the States' part that there will be an expectation that an enforcement action will follow when a facility is on the Watch List.

Because it is a management tool, not a targeting tool, that may not be the case. There may be reasons why the facility is there that have absolutely nothing to do with the lack of an enforcement presence or awareness of a problem at the facility.

So we can believe we can manage a program with the Watch List best by having a dialog with the States, and then addressing the problems going forward. The public still has the information that they need to make their decisions.

Mr. TIERNEY. Thank you.

Mr. OSE. I read the testimony about the Charles River, which I thought was very fascinating.

You have established a process by which there are 87 monitoring stations, and you can track virtually on an hour-by-hour, day-by-day, week-by-week basis trends of the water quality in the river, and if there is an anomaly or something you can then go to the point where the anomaly surfaces, so to speak, and then start looking.

And I actually think that you have in fact gone and done some CSO investigations in this manner.

I think that probably one of the great lessons of the project itself is that by actually measuring water quality you're able to, if you will, reverse course and find the source of any pollution.

What efforts has EPA made to expand the use of these performance measurements to manage other aspects of the water program, either of you?

Mr. VARNEY. Well, on a regional basis and on a national basis, we've been emphasizing watershed approaches in our work.

We had an initiative in which there were 20 watershed grants that were distributed all across the country, similar to the Clean Charles initiative, to encourage this kind of holistic thinking using a results-based approach to improving the water quality and setting a high bar for fishable/swimmable, and then measuring our progress over time toward the achievement of that goal in the river, as opposed to only focusing on the facilities along the river.

And what it's been able to do for us is to enable us to better prioritize our work, and to identify areas where there were aging-infrastructure problems that were seriously contributing to our difficulties.

That enabled us to work very closely with the watershed groups, not only with the States but the watershed associations. I believe you'll be hearing more on a later panel about that.

I want to emphasize that this partnership is not only with our State agencies, but also with our watershed groups who are out

there on the river helping us monitor, helping us identify problems and bringing problems to our attention so that we can get them corrected.

We've used a compliance approach as well as an enforcement approach, and have focused on all the contributions, which include non-point sources of pollution, not just the larger discharges.

Mr. OSE. Mr. Suarez, do you have anything to add?

Mr. SUAREZ. I would say that we are fundamentally continuing to look at ways that we can integrate the strategies so that we have compliance assistance and enforcement.

I point to our CMOM program—yet another acronym, and I apologize—capacity management operation and maintenance, at CSOs.

This is a program designed to work with municipalities to identify ways in which they can improve their CSO and SSO problems by undertaking an evaluation of their combined sewer system or their sanitary system and looking at what types of management and O&M steps they can take to improve short of having to invest significant capital in the design and implementation of a long-term control plan, requiring building of all sorts of new things.

The CMOM program has proved effective in our Region 4. It is one that we are rolling out to all the other regions that have significant CSO and SSO problems; and it is just the kind of strategy I think you're referring to, Mr. Chairman.

Mr. OSE. It's interesting how technology's advances have allowed us to accomplish so many things.

Across the street from my house is a creek. One of the projects at the magnet high school down the street is that they monitor the water quality at various points along the creek.

Now, the ECHO system I believe, if I'm correct, is basically an online ability to post whether or not a facility is compliant. I wonder whether or not it's possible to take that and tweak it so that it can track watershed compliance.

Mr. SUAREZ. I believe we have a link to our list of impaired waterways on the ECHO and compliance Web page, or that through our Web page you can get a list of impaired waterways; and so there is a way to link them up. It may not necessarily overlay from one data base or another.

That is something I can take back to our guys and see if there is the ability to do that. Because, I will tell you that, when we look at targeting and prioritization of where we need to take our work, being an impaired waterway is a critical component for us to determine where we want to spend time and our resources.

Mr. OSE. The reason I ask the question is that, in Sacramento as well as here in Ipswich or Peabody or Boston or wherever, I know there are individuals who are very interested, who have worked as volunteers in different organizations, who would be able to then do the monitoring, if you will, on this watershed or that, to provide the data electronically.

One question I do have is relative to a watershed's monitoring.

If you think of the Charles River project as the template, are there limitations to its applicability? In other words, is there a river too large or a watershed too small for that to be used?



Mr. SUAREZ. Mr. Chairman, I'm not aware of any limitations other than resources and simply the vastness of this great Nation.

We have only evaluated about 40 percent of the waterways in the United States. That is my understanding of what the numbers are. So there is just a tremendous number of waters in the United States that are still not even evaluated for us to be able to undertake that kind of analysis that you are referring to.

I'm not aware of any limitation technologically that would impede us from doing that kind of holistic watershed monitoring that was referred to that was undertaken in Region 1.

Mr. OSE. I'll be turning it back to Mr. Tierney here in a second.

The types of measurements that you used, for instance, on the Charles River, the mercury testing for coliform fecal matter and your testing for algae, are there specific tests that are precursor indicators of impaired waterways?

What I'm trying to do is build into the record something that somebody who might be in Santa Fe, NM might read at some point and say, maybe I'll try this.

Are there points of attention, if you will, that particularly highlight an impaired waterway?

Mr. VARNEY. Let me just add a couple of things to what J.P. said.

One is that there are different data bases that exist; and one of them is called STORET, which contains water quality data on a site-specific basis.

Just as I was leaving the State of New Hampshire, we were involved in establishing a data base that was location-specific; if you owned a home on a specific lake or were interested in a certain segment of a river, you could click onto that and then call up all of the water quality data that had been collected for that lake or pond or river segment. That would indicate what the water quality was in that area, all the parameters that were tested and who tested it, whether it was State staff or whether it was volunteers through a watershed association.

So there are some other data bases that come into play that would be of significant use to watershed organizations and to help identify place-based approaches that make sense.

Also, our approach has increasingly become related to non-point sources of pollution; because as we have reduced the number of point-source discharges and the severity of the point-source discharges, which tended to mask the non-point sources that were out there, we're now finding that these non-point sources are more easily identifiable, because we've reduced the pollution coming from these larger point sources so much and so significantly.

This has enabled us to undertake a whole range of new techniques.

For example, in some of our beach activity we're doing work that is DNA-type testing to identify different types of bacteria, and what the source of that bacteria was; was it from human fecal matter, was it from ducks, was it from dogs or pets, was it from stormwater runoff.

The real key has been to not only increase our monitoring, as we've done for all of our beaches in this country and to provide that information to the public, but to also trace it back to the source.

By being more consistent in tracing it back to the source and pinpointing the problem and dealing with that problem, we're able to achieve much more environmentally for less cost, and to be much more effective in working in partnership with local communities and with local watershed groups.

Mr. OSE. Congressman Tierney.

Mr. TIERNEY. Mr. Suarez, according to the reports the average penalty on violators is around \$5,000. The civil penalty could be up to \$25,000 per day.

I'm curious to have you tell us why the penalty average is so low, and what effect, adverse or positive, you think that might be having on the present amount of deterrence.

Mr. SUAREZ. One thing I want to reiterate before I go further is that the State data is incomplete. We do not require that currently.

So I'm reluctant to draw any large conclusions because of the lack of data that we have on State enforcement, which constitutes 75, 80 percent of the overall national enforcement information that we have.

We do have the EPA data that we do enter, and that is consistent with where the State data was coming out of; you correctly identified that \$5,000. That is a number that I think bears future scrutiny.

We are doing that, and one of the recommendations in the report has asked what is the cause for this fairly constant what I would call modest penalty amount of \$5,000 or \$6,000 for a violation.

We are going back to look at whether or not there is appropriate escalation, which is one of our enforcement response policy requirements, that a facility doesn't start at \$25,000 or \$27,500 a day, but rather we escalate in the event that there is a repeat offense.

We are going back and looking at facilities to see if there are repeat violations, and providing for escalation of fines and enforcement responses. We're also looking at seeing if there is a connection between the dollar amount of a penalty and the behavior of individuals.

I will point out that this past year we had the largest Clean Water Act penalty ever assessed against a company in the United States.

That was a \$34 million penalty against Colonial Pipeline for an oil spill that impaired a number of miles of rivers and streams, and had a number of incredibly significant environmental impacts.

That penalty certainly gets the attention of everybody; and lets them know that, if you violate the Clean Water Act, there are serious consequences on the penalty front for doing so.

Mr. TIERNEY. It will also get your averages up there a little bit.

The report also talks about the decline of enforcement activities, in the last few years before it was issued, of some 45 percent.

You reacted to that, I believe—don't let me misquote you—I thought you said that a lot of that was attributed to the fact that you were shifting some of your emphasis to other enforcement areas.

My question is, shouldn't the EPA have enough resources to focus adequately on both of these areas?

Mr. SUAREZ. How we manage our resources is always, I think, going to be one of the challenges for my office.

Under the President's request we have 3,411 full-time-equivalent employees, and we have in this most recent budget requested from the President over \$500 million in resources for us.

I think for us the goal is to make sure that we are putting our resources in the right place.

I don't necessarily believe in bigger government, I believe in better government; and if we can use our resources more effectively, then I want to do that.

But if, Mr. Tierney, at the end of the day we don't have adequate resources, I am very comfortable going to my Administrator and asking for more resources when needed.

Mr. TIERNEY. Shouldn't we be a little concerned, though, at being asked to make a prioritization between one of these areas and another?

I would suggest maybe a review has to be done sooner rather than later. The 45 percent decline that we have heard mentioned is a precipitous decline on any basis, and I think it is going to come down to resources. I'd like to have further interaction with your office on that as we go forward.

By our calculations, it looks like the administration is looking to cut 54 enforcement positions. What's the effect of that cut going to be on this region? In one previous letter, you may recall that you indicated that you were in fact studying consolidation or changes in your field offices.

I'd be really interested in knowing what that study shows. Are you really thinking of closing down some field offices and consolidating them? How does that affect our region; how does it affect compliance there? All of those issues, I think, are related.

Mr. SUAREZ. As to the notorious 54 FTE, I apologize, but I think a little background here is helpful.

When the President submitted his budget request last year, I believe we were operating under CR. We didn't have a final budget in place yet. The President's increase was for a 100 increase in FTE.

Subsequent to that, Congress gave us 154 FTE for the operating plan. The result of which is that now we are faced with a budget that looks like a 54 decrease in FTE rather than, as the President intended, a 100 FTE increase in his budget.

We will use however many resources we get. We are trying to operate at full capacity; and with more resources, absolutely there is more work to be done. We feel comfortable right now that our most important strategy is to look at the employees that we have, and where we're putting them.

As to consolidation, I believe you're referring to, Mr. Tierney, our criminal program—

Mr. TIERNEY. Right.

Mr. SUAREZ [continuing]. And we are in the late stages of a review of our criminal program.

I've asked a senior member of my staff, who is not a political appointee, to undertake that evaluation for me. He has been doing a fantastic job. We anticipate that report will be concluded in November, and one of the issues that will be addressed there is whether or not consolidation of offices is appropriate and would allow for more effective use of our criminal enforcement program resources.

Mr. TIERNEY. So it's premature to tell us how it would affect our region?

Mr. SUAREZ. Yes, it is.

Mr. TIERNEY. At one point in our communication back and forth, you indicated that having 1,500 uncompleted investigations was normal. Do you still hold that position?

Mr. SUAREZ. Again, I don't mean to quibble with terminology, but we have differences for a case open as opposed to an investigation started.

In order for an investigation to be opened, if you will, it can involve perhaps something as vague as an anonymous letter that comes into the agency saying XYZ facility is polluting in violation of their discharge permit. We may have nothing else to go on.

We'll open up that matter, but it won't become a case initiation until we've dedicated a certain amount of time, or there is credible evidence that would warrant further investigation.

That level of open investigations has been fairly constant over the years, and is to be expected. We want to address that because we don't want them to stay open that long——

Mr. TIERNEY. Some of them could be pretty important or significant.

Mr. SUAREZ. Some of them may be; when they're that important a full case will be opened and initiated, and we'll move from there.

I'll note that last year we had the highest number of cases initiated ever in the history of the criminal enforcement program.

Now, a fair number of those were counterterrorism-related in response to September 11; but even our core program had over 480 cases initiated in the criminal program. That is one measure of how active we are.

I think that the answer, Mr. Tierney, is that we are very active. Some of those investigations turn into cases and some don't.

Mr. TIERNEY. Just to wrap up, I know the chairman has more questions, but we were talking about 154, 100.

There are many of us who believe you could use quite well 154. That's compliments to you and Mr. Varney and the people that are working there.

We don't want to have you form priorities where enforcement drops 45 percent in one very important area because you have to switch resources over to another equally important area, just to make that my position.

Mr. VARNEY. Thank you, Mr. Tierney.

Mr. TIERNEY. Let me just wrap up, then, with a couple more questions I wanted to cover.

One was the Federal Facilities Significant Noncompliance rate. The report indicated it was some 5 to 15 percent higher than other facilities. I'd really like to just talk briefly about, what can we do about that?

Is it just because of the infrastructures deteriorating in those areas, or the funding for infrastructures not being there? What do you have in mind to deal with that, short of penalties?

Mr. SUAREZ. I think, Congressman Tierney, that the aging infrastructure is a critically important issue that the Federal facilities must address.

Just as the communities in Region 1 are facing challenges because the infrastructure is old and capacity is not there to meet the growing demand, so too in our Federal facilities we have expanding services, and we're just not able to meet some of the capacity that is there.

Some of the things we are doing is, we are providing more compliance assistance to our Federal partners, so that they understand our obligations; more importantly, they understand what it takes to get a facility into compliance.

We have just launched an effort to upgrade and improve our Federal Facilities Compliance Assistance Center, which is a Web-based system which would allow our Federal partners to go in, look at our data base, look at their problems, and figure out how to correct them.

We are upgrading that system. It's an important system, and it's one that will help.

We are also in the process of undertaking some, for want of a better word, audits of our Federal Facility partners where we will be invited in—it's not an inspection; it's an audit—to evaluate their facility and to look at where improvements can be made in order to get the facility back into compliance.

We've had a number of takers. Our success rate has been terrific.

We are again inviting our Federal partners, letting them know that there are resources available to them. It's not adversarial, it's cooperative; and, we think we're going to get some good results there as well.

Mr. TIERNEY. I'm going to telescope some of these things down.

I assume you took the report, and you're going to address all these issues in it?

Mr. SUAREZ. We are.

Mr. TIERNEY. Issues of penalty and escalation, you mentioned earlier. I think those are very important to look at to see what the effects of those are.

Do you agree that at this point at least there appears to be a positive relationship between what EPA or the States do in enforcement activity and compliance?

Mr. SUAREZ. I think that there does seem to be a correlation.

Mr. TIERNEY. I think there is, too, and I'd like to see a report come through about what we're going to do about it.

What do you make of the fact that the report asserts that facilities that are subject to formal action have the highest rates of recidivism; which I think is a bit of a twist on that?

Is that because we're getting problem facilities, as the report suggested, and therefore you can expect them to keep being bad; or, is it because our penalties aren't high enough, and they're just sort of laughing at us and carrying on business?

Mr. SUAREZ. I think it may be those things.

It may also be the need for us to really embrace the smart enforcement initiative; because, oftentimes when we're chasing a bean it's very easy for us to go back to a facility that's a big, complex facility and know that we're going to be able to find a violation.

It's much more challenging to spend time doing the CSO investigation and work that Bob has referred to throughout the morning.

So I think part of it may be that we tend to go back to those facilities where the bean is easy, not necessarily where the environmental benefit is to be had.

And I want to look to see if there is a correlation, as you spoke of, of whether or not we can use that resource a little better.

If there is really nothing for the facility to do—it's got a violation, it's going to have a violation again, it's not changing its management process, it's not changing its pollution-control equipment, and we're fining them modest amounts every year and nothing is happening—we have to ask is it escalation, or are we just going to the easy ones and ignoring the big problems?

Some of the things I've seen from Mr. Tierney indicate to me that our efforts have oftentimes been directed at getting outputs for the sake of outputs, and not getting results that matter.

I'm trying to move us into an area where we can say comfortably that our output has produced outcomes that made a difference—that we're not going to focus so much on going back to those same facilities that are the old tried-and-true, the old reliables, we know how to get them, where to find them, and ignoring the big ones that are out there polluting and impairing the waterways, that would really make a difference.

Mr. TIERNEY. But you're going to study what to do about the ones that are out there, and that's the escalation issue?

Mr. SUAREZ. That's exactly right. There is no permit to pollute, if you will; there is no allowance. You're not allowed to pay a penalty and continue to pollute.

But, my instincts tell me that some of it is related to the practices that we had historically, and how we need to move in a new direction.

Mr. TIERNEY. Let me wrap it up, then, with one positive note on this.

I want to thank both of you, and encourage both of you to continue on with your issues of environmental justice.

I know what you mentioned in your testimony is important. If you have comments to make on it, that's fine; but, I just want to reiterate the fact that I agree with you on how important that is, and I want you to come to Congress with any suggestions you have about making sure we address that issue.

Mr. SUAREZ. Mr. Tierney, I'm delighted that you brought this up.

One of the things we're doing in our next planning cycle is to make sure that geographical targeting, to include watershed and environmental-justice communities, is part of what we're doing.

I feel very strongly that we must make sure that our environmental-justice efforts are begun in earnest, and that no community is bearing more than its fair share of the environmental burdens.

It's something that we believe in, that the administration believes in, and you've got nothing but our full support.

Mr. TIERNEY. I want to thank you both for your testimony.

Mr. OSE. I want to thank both of you for joining us today.

We have some questions that did not get asked, but we'll send them in writing; and a timely response will be appreciated.

And again, we appreciate your being here.

We're going to take a 5-minute break.

[Recess.]

Mr. OSE. We're going to reconvene here for the second panel of our witnesses for today's hearing.

We are joined on this panel by Steve Thompson, executive director of the Oklahoma Department of Environmental Quality; Roberta Savage, executive director of the Association of State and Interstate Water Pollution Control Administrators; Dr. Shelley Metzenbaum, director of the Environmental Compliance Consortium; Scott Segal, a partner at Bracewell & Patterson, LLP; and, Pam DiBona, vice-president for policy, Environmental League of Massachusetts.

Our next witness is Mr. J. Charles Fox, who is the vice president of public affairs for the Chesapeake Bay Foundation; and, also Mr. Eric Schaeffer, the director of the Environmental Integrity Project.

As you all saw in the first panel, we have a certain elaborate dance we go through; we're going to have to swear you all in.

Now, you have all turned in testimony for today, and we have copies at the back. Everybody up here has provided testimony to the committee. There are copies of everybody's testimony in the back for everybody who wishes to see it.

Again, our procedure here is we swear you in; and then each witness will have up to 5 minutes to summarize. Be assured I've read your testimony; I assure you Congressman Tierney has too. You don't have to use all 5 minutes, considering the size of our panel; it's an unusually large panel.

[Witnesses sworn.]

Mr. OSE. Let the record show that the witnesses answered in the affirmative.

Our first witness on the second panel is Mr. Steve Thompson, the executive director for the Oklahoma Department of Environmental Quality.

Mr. Thompson, you are recognized for up to 5 minutes. Welcome.

**STATEMENT OF STEVE THOMPSON, EXECUTIVE DIRECTOR,  
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mr. THOMPSON. Thank you.

Mr. Chairman, members of the committee, I would like to take a moment to explain my understanding of the delegation sections of the Federal environmental laws.

It is my belief that the framers of these acts understood, even before it became popular, the phrase "Think globally; act locally."

The Federal laws reflect that activities such as research and development, nationally consistent standards, rulemaking, data analysis and program review are best accomplished at the national level; but, that implementation could best be accomplished by those closest to the problem, the States, and in some cases the localities.

The Environmental Protection Agency's structure of strong regional offices was established primarily to ensure that local solutions could conform with Federal expectations.

Oklahoma's citizens and regulated entities overwhelmingly supported us in our delegation effort because, like Congress, they understood that solutions could best be achieved at the State level.

Oklahomans also understood that if we chose not to adopt at least minimum Federal standards and rules and to make a commitment to enforce them, and report our efforts, Oklahoma's delegation status could be at risk.

For national consistency, however, Congress wisely retained EPA authority to take enforcement actions where States could not or would not take action. With that understanding, I want to talk a little bit about Oklahoma's concept of delegated enforcement.

It is a guiding principle of our agency that compliance with environmental statutes is our goal; and that enforcement, while clearly a fundamental tool, is only one tool. To help set the stage, keep in mind that Oklahoma has only two cities with a population greater than 100,000, and that 94 percent of our communities have fewer than 10,000 people.

Federal statutes require regulation of facilities that discharge wastewater, whether large or small. While important, these discharging facilities represent only a portion of the total potential impact to water quality and of Oklahoma's total effort.

We have 566 discharging facilities; however, the remainder of our total universe of 2,300 wastewater facilities also have potential impacts on water quality.

As in the Federal scheme, Oklahoma's regulatory universe is not limited to discharge situations. Any enforcement strategy must begin with the approach that the regulated facility, whether large or small, is responsible for knowing the regulations to which it is subject. "I didn't know" is never an appropriate legal reason for noncompliance.

From a practical standpoint, however, many of our communities do not possess and cannot afford to employ the kinds of technical expertise necessary to understand the multitude of Federal and State regulations. This is equally true of small businesses that are swept into the inventory of regulated facilities.

The traditional closed-book test, where government relies solely on the facility to understand regulation, while legally defensible, is not practically defensible; so, we provide open-book tests, through a number of efforts.

First, we provide communities with technical operational assistance. On the industrial and commercial side, we provide targeted outreach by sector. We also authorize compliance periods after the outreach to allow the facilities time to come into compliance. Then, we inspect. Those who fail to take advantage of this opportunity face enforcement.

Does this reduce the potential for collecting penalties? We hope so. Does it increase compliance? We believe so.

But, obviously, our assistance and outreach efforts cannot and do not resolve, or even reach, all noncompliance issues. Sometimes enforcement action is necessary.

A typical enforcement process begins when a violation is determined. If that violation is a release that is a substantial endangerment to human health or aquatic life, or if the violation is a failure to properly operate the facility, we will go directly to an enforcement order.

In many cases the violation from municipal facilities is caused by deteriorating infrastructure. In those cases we ask for an enforce-



ment report, we schedule compliance, and we monitor the completion of that effort.

I have to tell you that I am extremely reluctant to take financial resources away from a community, particularly a small community, in the form of a penalty when that funding is vital to meet planning and wastewater infrastructure needs. Our public-water-supply supervision program is operated in much the same way.

In conclusion, I believe that enforcement should not be a separate and independent effort, and was never intended to be more than a component of the total regulatory process. We strive for compliance as our overriding goal; not annual penalties collected.

We urge the Nation to reclaim the unique roles of the States and the EPA in protecting and improving the Nation's environment; and we hope that all of you here today recognize that the States, despite their ever-shrinking resources, have an obligation to protect public health and the environment that includes delegated Federal programs, and beyond.

I'll be happy to answer, at the appropriate time, any questions. Mr. OSE. Thank you, Mr. Thompson.

[The prepared statement of Mr. Thompson follows:]

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**Oklahoma's Enforcement of Federal and State Water Laws**

My name is Steve Thompson. I have been the Executive Director of the Oklahoma Department of Environmental Quality (DEQ) since July 2002 and previously served as the Deputy Executive Director beginning in July 1993. I have experience in managing State environmental programs since 1985. I currently serve as the Secretary-Treasurer of the Environmental Council of the States, the national nonpartisan association of State environmental commissioners, and I served as the chair of its Compliance Committee in the past. I want to thank the Committee for inviting me to testify about Oklahoma's enforcement of Federal and State water laws.

The Federal Clean Water (CWA) and Safe Drinking Water (SDWA) Acts, as well as the Clean Air (CAA) and Resource Conservation and Recovery (RCRA) Acts anticipate the delegation or authorization of program operation for those Acts, including enforcement, to States that have demonstrated resource capacity, as well as companion State statutory and regulatory authority. Oklahoma was the first State in the nation to receive delegation of the Federal program for drinking water in 1977. In 1966, Oklahoma received delegation of the National Pollutant Discharge Elimination System (NPDES), the national water pollution control program, for industrial and municipal discharges. Oklahoma also has received authorization under the Clean Air Act (CAA) and the Resource Conservation and Recovery Act (RCRA).

Before I discuss Oklahoma's water enforcement effort, I would like to take a moment to explain my understanding of the delegation sections of the Federal environmental laws. It is my belief that the framers of these acts understood, even before it became popular, the phrase "think globally, act locally". These laws reflect that activities such as research and development, nationally consistent standards, rulemaking and program review could best be accomplished at the national level. The laws were designed so that implementation could best be accomplished by those closest to the problem, i.e., States and, in some cases, localities. In States familiar with the nature of their specific environmental problems and their cultures and, in States the size of Oklahoma, the people involved in the environmental effort - both citizens and representatives of regulated entities - could best develop individual solutions under the umbrella of Federal standards and rules. The Environmental Protection Agency's (EPA) structure of strong regional offices was established primarily to insure that those individual solutions could conform with Federal expectations. Justice Brandeis' metaphor that "States are the laboratories of policy development" proved true in relation to environmental programs. Ideas such as pollution prevention, waste minimization, environmental management systems, compliance and regulatory assistance and many other innovative programs all took root in State environmental agencies.

This is not to mention the explosion in resources available to the national environmental program effort that delegation of programs initiated. Citizens and regulated entities alike understood that access to program managers was facilitated at the State level. When my agency was seeking delegation for the NPDES program from the EPA prior to actual

delegation in 1996, we were supported by both citizen groups and regulated entities. Citizens lobbied our legislature in support of general revenue to help establish fiscal capacity. The regulated community supported rules that imposed fees upon them for program support. The legislative effort to adopt State statutes companion legislation to Federal statutes received wide-ranging support. It was understood by citizens, the regulated community and the legislature that if we chose not to adopt at least minimum Federal standards and rules and make a commitment to enforce them, that Oklahoma's delegation status would be at risk. Congress wisely retained EPA authority to take enforcement action only in instances where States could not or would not take action.

As enforcement programs matured, EPA and the States moved to further clarify their individual roles in enforcement. In 1986, the *Revised Policy Framework for State/EPA Enforcement Agreements* was developed. It may represent the last time States and EPA were in substantial alignment on the role both would play in enforcement. The 1986 Framework addresses the following key areas: (1) State and Federal enforcement agreements; (2) program review and key measures to define State performance; (3) EPA processes and duties; (4) direct Federal enforcement in States; and (5) open State/Federal dialogue. The pertinent parts of the Framework follow:

#### **1. State/Federal Enforcement Agreements**

State and Federal agreements are to be developed in coordination by Regions and States.

Regions are to have substantial flexibility to tailor national guidance to State-specific

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circumstances. Priorities are to have a national component as well as account for environmental concerns that are unique to a particular State, such as financial, technical and enforcement capacity. At a minimum, the agreements require the establishment of timeframes for State task completion that recognize State constraints but ensure consistency with national goals. Additionally, the Framework calls for an appropriateness component that includes enforcement response choices, enforcement consistency and adequate but flexible deterrence methods.

Agreements are to reflect mutual understandings. The 1986 Framework requires EPA Regions to “(1) be clear and ensure there are ‘no surprises’; (2) make arrangements with the State so that actions taken are constructive and supportive; and (3) tailor the application of the national program guidance to the States’ programs and authorities.”

## **2. Program Review Criteria**

Program review and key measures to define State performance are critical to determining a quality program. Most essential is a timely and appropriate enforcement response. Clearly defined benchmarks and milestones for determining what constitutes timely and appropriate actions are crucial. Also important is accurate recordkeeping and reporting. Reviewable and accessible records are essential to supporting effective program evaluation and goal-setting. Other quality State program components that are to be reviewed and measured include: (1) inventories of regulated sources that are complete, accurate and current for both national and State priority-setting efforts; (2) clear and

enforceable requirements for regulated entities that consider Federal as well as State provisions; (3) compliance monitoring that is accurate and reliable for determining potential violations, gathering evidence, establishing an enforcement presence and improving compliance; (4) methodologies for tracking and resolving significant noncompliance; (5) various methods of deterrence and their effectiveness; and (6) the soundness of a program's resources and management.

### **3. Program Review**

EPA processes and responsibilities regarding State efforts are critical to the national environmental compliance effort. Such processes are to include routine and nationally consistent audits of State programs. EPA should set timeframes for audits that apply consistently to all Regions, and audits of State programs should be required at least annually in all Regions. National consistency should be an overarching goal of audit review. The audits are to result in consistent consequences. State performance that meets or exceeds good program criteria and measures will result in less frequent EPA reviews, inspections and reporting requirements as well as allowing the State to decide on priorities of concern. Conversely, where a State fails to meet the criteria for good performance, EPA will take appropriate actions such as increased inspections and reporting requirements, and more frequent program audits.

### **4. Criteria for Direct Federal Enforcement**

Direct Federal enforcement criteria in States can only occur when:

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- the State requests or refers an action to EPA.
- a State fails to take a timely and appropriate action based on known and agreed-to criteria.
- a national precedent is identified, or a violation of an existing EPA order or consent decree occurs.

In every instance, EPA cannot take direct enforcement until it establishes a need for Federal involvement based on: a designation of national significance; an identification of significant risk or damage to the environment or public health; a demonstration of significant economic benefit gained by noncompliance; a pattern of noncompliance; or an interstate issue. All direct enforcement by EPA should be conducted and managed in coordination with the State. Only issues of national precedence should be managed solely by EPA, but coordinated with the State.

**. No Surprises**

There can be no surprises to the States regarding enforcement efforts. EPA is to establish a policy of open dialogue that results in Region notification to and consultation with its States. In no case is an EPA inspection or enforcement action to occur in a State without advance notification and consultation. Regions are to establish procedures in coordination with the States that identify criteria for inspections and enforcement actions.

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The process envisioned by the 1986 Framework was not without its problems. Any program review between EPA and the States will create tension. However, the 1986 Framework represents a mutual effort to define the expectations of State programs, outline consequences of failure to meet expectations, and more clearly define the role of both EPA and the States. In my view it is the document that is most respectful of limited resources because it allows both parties to do what they do best and most clearly defines the intent of the delegation provisions of our Federal environmental laws.

This process generally worked well although States sometimes chafed under EPA's oversight authority. States began in the mid 1990s to call for a more mature partnership with EPA. It is unfortunate that States did not make it clear that they were calling for a revamped enforcement process because their implementation experience had surpassed that of EPA. What States got instead was virtual abandonment of the established enforcement review process. At about the same time, EPA reorganized and created the Office of Enforcement and Compliance Assurance (OECA). Inherently, when environmental programs are organized by function the primary goal becomes the function. The best evidence of this axiom is OECA's actions. OECA severely limited the regional program review function in favor of applying resources to direct Federal enforcement despite the general effectiveness of enforcement efforts in States with delegated programs. It soon became evident that OECA intended to usurp the enforcement programs of States. Regional offices that had been the linchpin of a cooperative EPA/State effort now became little more than satellite enforcement offices for OECA.



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The results of this change are increased acrimony between EPA and the States, inconsistent enforcement among regions and in a time of financial strain at the State level, duplication of effort and waste of valuable resources. Perhaps the most unfortunate consequence is that relationally and organizationally we are distracted from our primary goal: protection of our air, land and water.

While it is clear that I have strong feelings about this, this testimony is not intended to place blame. It is only intended to advise you of organizational issues that you should be aware of. As Congress considers elevation of EPA to cabinet level status, an organization that promotes partnership between EPA and the States, and focuses on protection of the media, in my view, is vital.

#### **Oklahoma's Water Pollution Control Program**

The Oklahoma Department of Environmental Quality was delegated responsibility for the National Pollutant Discharge Elimination System (NPDES) program for industrial and municipal dischargers in 1996. We had operated the program for municipalities under a Memorandum of Understanding with Region 6 for many years prior to delegation.

It is one of the guiding principles of our agency and, I would suspect, many State environmental agencies that compliance with environmental statutes is our goal and that enforcement, while it is clearly the foundation tool, is only one tool. There are a number of reasons. First, the Clean Water Act through its delegation provisions anticipates that States,

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because of proximity to problems, are better able to determine a range of possible compliance solutions. EPA regional offices should exist to insure that these solutions can be accomplished within the Federal regulatory framework. Second, many facilities and activities not regulated under Federal statute are regulated in Oklahoma under State statute so there exists a greater opportunity to explore an expanded range of options. Keep in mind that Oklahoma has only two cities with a population greater than 100,000. Thirty-six communities fall within the range of 10,000 and 100,000 population, and 551 of our communities have a population of less than 10,000, with 370 of those below a thousand people.

Federal statutes require the regulation of discharging facilities. Facilities that discharge in excess of one million gallons of water per day are considered "major sources" by EPA while those that discharge less than a million gallons are considered "minor sources". EPA's enforcement emphasis is typically on major sources. In Oklahoma, we have 68 major municipal sources and 31 major industrial sources. While important, these facilities represent only a portion of the total potential impact to water quality and of our total effort. We have 305 minor municipal sources and 261 minor industrial sources. But, our total universe of regulated facilities includes over 1600 municipal-type systems and over 700 industrial systems. Many of these are operated as total retention or land application systems. Obviously, small systems dominate our regulatory effort.

Any enforcement strategy must begin with the approach that the regulated facility is responsible for knowing the regulations to which it is subject. "I didn't know" is never an

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appropriate legal reason for noncompliance. But from a practical standpoint many of our communities do not possess and cannot afford to employ the kind of technical expertise necessary to understand the multitude of Federal and State regulations. This is equally true of small businesses that are being swept into the inventory of regulated facilities, particularly as we have become more active in the area of stormwater. The traditional "closed book test" where government relies solely on the facility to understand regulation while legally defensible is no longer practically defensible. So we are trying to provide open book tests through a number of efforts. First, our local field staff and a portion of our water quality engineering staff are available to communities to provide technical and operational assistance. Until budget shortfalls forced us to abandon the project, we had contracted with several retired civil engineers as "circuit riders" to assist in this effort. On the industrial/commercial side we have provided targeted outreach to the ready-mixed concrete, asphalt batch plant, metal foundry and other sectors in an attempt to show what compliance "looks like". Our compliance inspectors are being trained in the same setting so that all involved will understand the same requirements in the same way at the same time. We have authorized compliance periods after the outreach to allow the facilities time to come into compliance. Then we inspect. Those who fail to take advantage of this opportunity face enforcement rather than a compliance assistance attitude by the agency. Does this reduce the potential for collecting penalties? We hope so. Does it increase compliance? We believe so.

Finally, the enforcement policy toward municipalities has traditionally been different than the policy toward for-profit entities. In my view, the notion of compliance as the goal finds its

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firmest footing here. I am extremely reluctant to take financial resources away from a community, particularly a small community, in the form of a penalty when that funding is vital to meet planning and wastewater infrastructure needs.

Our typical compliance process begins when a violation is determined. If there is a release that is a substantial endangerment to human health or aquatic life, or in some cases where the issue is failure to appropriately operate the facility, we will go directly to an order that includes a penalty. Over the past three years the Oklahoma DEQ has assessed about \$630,000 in municipal penalties. Yet even here about two-thirds of the penalties assessed have been directed to needs in the community in the form of Supplemental Environmental Projects. In many if not most cases, the violation is caused by deteriorating infrastructure. In most of these cases, the department and the city agree in a consent order to a schedule which begins with the submittal of an engineering report, moves to the pursuit of necessary funding and ends with the construction and appropriate operation of the facility. Orders include stipulated penalties that are assessed only if a city fails to meet the schedule.

#### **Oklahoma's Public Water Supply Program**

Our Public Water Supply Supervision Program, delegated to Oklahoma in 1977, faces much the same problems and is operated in much the same way. As with wastewater, the Oklahoma legislature has established drinking water protection requirements above and beyond the Federal standard. The most obvious example is that EPA set forth regulation for all systems that served more than a population of 25. In Oklahoma, these smallest of systems, known as

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minors, are required to meet the same standards and are subject to permitting, monitoring and enforcement just as other systems. In Oklahoma, public health concerns do not cease at 25 people. The DEQ currently has 2,228 permitted public water supply systems. Only four systems serve a population of over 100,000, and a total of 56 serve a population of 10,000 or more. Enforcement of our drinking water program has been operated in cooperation with Region 6 much as described in the 1986 Framework document. Prior to this year, about 96% of all drinking water systems were in compliance with all standards, the only outlier being systems that were not in compliance with the nitrate standard. With the advent of the rules related to disinfection-by-products and enhanced surface water treatment, as well as the impending start-up dates for the arsenic rule, the groundwater implementation rule and the radiochemical rule, we can expect our noncompliance numbers to increase. We intend to try to use the same technical, operational and regulatory assistance process in addressing these new rules as we have traditionally used. But as State budget shortfalls have become greater, our legislature's ability to finance this assistance is questionable. We will make the argument to the legislature that this problem is somewhat akin to the oil filter commercials. Pay me now in the form of compliance assistance, or pay me more later in the form of enforcement. Failing both, Federal enforcement is on the horizon for large systems. Unregulated drinking water supply is in the future for small systems.

In conclusion, enforcement should not be a separate and independent enforcement effort and it was never intended to be more than a component of the total regulatory process. We must strive for enforcement consistency across the nation, but also tailor it to the uniqueness of

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each State. We must reemploy the unique roles of States and EPA in protecting and improving the nation's environment, and we must recognize that States have an obligation to protect public health and the environment that extends beyond the scope of Federal programs. The 1986 *Revised Policy Framework for State/EPA Enforcement Agreements* remains the best model for the roles EPA and States should play in enforcement. By following this Framework, we can all utilize the most efficient methods, tools and expertise to protect the nation's environment. The wheel is there don't reinvent it just polish it.

I believe that the process outlined in this testimony is protective of human health and the environment, understanding of a world of limited resources and responsive to all our citizens. I would be happy to answer any questions.

Mr. OSE. Our next witness is Ms. Roberta Savage; and, again, she is the executive director of the Association of State and Interstate Water Pollution Control Administrators.

Welcome. I recognize you for 5 minutes.

**STATEMENT OF ROBERTA SAVAGE, EXECUTIVE DIRECTOR, ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS**

Ms. SAVAGE. Thank you very much, Mr. Chairman.

I have the joy and privilege of being born in Massachusetts and raised in California, so that covers both the chairman and the ranking member's home States.

Mr. OSE. You're moving up.

Ms. SAVAGE. And our association member from Massachusetts is a board member, as well as my vice-president for California; so we've got it pretty well covered today.

I would like to thank Danielle and the staff, Mr. Chairman, for their fine work and for picking us up at the airport. I have really enjoyed working with your high-quality staff.

I am the executive director of ASIWPCA, a position I've held since 1978. I've been in the water business for more than 30 years; and, like Steve, I started when I was a child.

And I've had the opportunity to work at EPA, with an environmental organization, and with a corporate association, again dating back to 1978, which is now 25 years.

I've also had the joy and privilege of working with the framers of the Clean Water Act, Ed Muskie, Howard Baker and others, who are the foreleaders of the 1972 statute.

In talking with those folks about what they envisioned, it was very clear that they knew that the program as they created it would not be successful unless it was managed at the State level.

I listened to J.P. Suarez, and I listened to Bob Varney. I respect them both tremendously; but if you listen to them, it sounds like this is a Federal program.

The fact of the matter is that 45 of the 50 States are delegated the Clean Water Permitting program. EPA manages only five States. EPA has larger backlogs in most cases than the States do; and as J.P. indicated, the enforcement data they shared with you is only from five States.

When Bill Rickelhouse, a former EPA Administrator, was asked these questions, he said the most effective enforcement and the most effective thing we can do is to reach compliance; and to just count numbers and just count beans is not what we're about. What we're about is clean water, however we get clean water.

That would mean a number of different things. That's the opportunity to educate. When a new permittee comes on line, you go and you help them understand what the rules and regulations are. If they're having problems, you send your people out there; you make sure they understand the requirements.

You go through the whole range of options administratively; and if they're a bad actor, then you litigate. Then you cause enforcement to happen, and you make sure that it happens. But again, what we're after here is compliance with the statute.

I'd like to go back because I think Mr. Tierney asked the question about what's the system? And again, in talking with Mr. Muskie and Mr. Baker, they knew that it had to start at the public level.

So, what's the first thing that happens? The public decides how they're going to use their water. They designate their use. Then they set a standard, and then determine load allocations, so that they can decide how much pollution can go into a water body and still meet the standard.

So then you incorporate those loadings into a permit.

The next thing is that you make sure that you're monitoring your water, so that if anybody is violating a permit you know that; and then you have your inspections, and then, if you're not doing what you need to be doing, then we litigate.

But that, to us, is a failure. That's the last thing on the list. If the State has to litigate, they haven't done the first part of the program correctly.

In 1990, Mr. Chairman, there were 100,000 permittees. Today there are 500,000; and that doesn't even include the new Confined Animal Feeding Operations [CAFO] regulations, Combined Sewer Overflows [CSO] regulations, and the stormwater regulations.

When all of those things come on line, we're going to have hundreds of thousands of permits more than we currently have.

There are lots of options. We can educate, we can outreach, we can track, we can provide grants to local governments, and again, we can go ahead and take action if we need to.

Again, this was never intended to be a Federal program.

It concerns me that the very issues that our Federal colleagues are not doing what they are supposed to be doing—and I worked for the agency, as many of us here on this panel have—like providing the kinds of implementation guidelines, providing the kinds of policy regulations, providing the Permit Compliance System [PCS] system, a data system that can successfully track what we're doing in the field—which we don't have; it's inadequate, it's old, it doesn't track the data, it doesn't track the toxics that you were asking about, it doesn't track mines, it doesn't track CSOs, it doesn't track CAFOs—we're asking the States to input all of this data into a system that doesn't work.

I would like to suggest that the Feds are the backstop. They're not the pitcher, they're not the catcher, they're not the batter; they're the backstop, and they should only be used as a backstop.

I would like to close by saying that there are a couple of things that are important here. Forty-five States have NPDES delegation, and they only have half of the money they need to run these programs.

When Chuck Fox was the Assistant Administrator, we jointly did a GAP analysis of how much is needed to run this program successfully. Half of the money we need, we don't have it; it's not there. So definitely, the gap is somewhere in the neighborhood of \$700 million to \$800 million. Half of that is needed for the compliance and enforcement program.

We need to close that gap; and I would like to conclude by saying that I too concur that the enforcement component should be integral to the management program.



It should not be a separate initiative; it should not take away from the overall management of the water program. As currently structured at U.S. EPA, enforcement is costly, it's inefficient, it's a turf battle; it is not the kind of management system that we think we need at the Federal agency. It is cumbersome, and it doesn't function well. In short, the program and the U.S. EPA structure needs an overhaul.

So, I will be submitting our monitoring program assessment survey for the record, an article I wrote on monitoring for the Environmental Institute, and finally our strategic plan, that says the goal of the States is clean water everywhere for everyone, and that's what we're committed to do.

Thank you.

Mr. OSE. Thank you, Ms. Savage.

[The prepared statement of Ms. Savage follows:]



Association of State and Interstate  
Water Pollution Control Administrators



750 FIRST ST., NE • SUITE 1010 • WASHINGTON, DC 20002 • TEL: 202.898.0905 • FAX: 202.898.0929 • WWW.ASIWPCA.ORG

**Testimony Before the  
House of Representatives  
Committee of Government Reform  
On  
Clean Water Act Enforcement  
Field Hearing in Ipswich, Massachusetts  
October 14, 2003**

Mr. Chairman and members of the Subcommittee, my name is Roberta (Robbi) Savage. I am the Executive Director of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), a position that I have held since 1978.

The Association is the national, nonpartisan, nonprofit organization of the State and Interstate Water Quality Agency officials who are charged by law to administer the provisions of the Clean Water Act.

On behalf of the membership, let me extend our appreciation for your kind invitation to appear before you today to discuss the implementation and enforcement of the Clean Water Act.

As you know Mr. Chairman, the Clean Water Act (CWA) was designed by the Congress in 1972 to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Congress was clear and mindful of the importance of giving the States the lead role in the development and implementation of this nation's water quality programs.

There are 45 States with approved National Pollutant Discharge Elimination System (NPDES) programs, which means that 45 of the 50 States are designing and issuing permits to dischargers and are responsible for assuring compliance with the permits and the requirements of the CWA.

In the 31 years since the enactment of the statute, States have come to recognize that protecting and improving the nation's water quality presents many formidable and daunting

challenges. Effective watershed protection requires a comprehensive, integrated balance of resources for monitoring, standards setting, planning, permitting, compliance assistance, inspection, enforcement, nonpoint source management, data management, infrastructure financing, and other related activities.

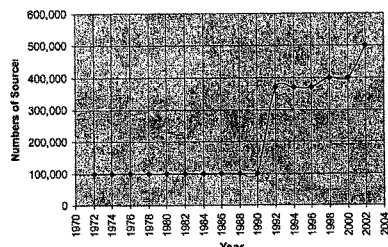
During the course of this testimony, I will outline the States' perspective on Clean Water Act enforcement and I will share with you some of my personal views, as one who has been involved with the national water program for more than 30 years. I will also discuss the delicate balance essential at the State level, between traditional enforcement techniques and compliance assistance.

Mr. Chairman, in most States, traditional enforcement and compliance assistance go "hand-in-hand." States are in the best position to understand local and State stakeholder priorities and needs and thus determine the appropriate mechanism for achieving compliance. Given the diverse needs, it is important that States have the flexibility to determine which tool best fits the facts of the situation. There is a reason why the old cliché "one size does not fit all" is pulled out at hearing after hearing. As trite as it may sound, this statement is a truism and the underlying philosophy that must guide the implementation of the statute.

To put enforcement in context, it is important to consider:

- In most States, the same staff is responsible for permit development, compliance, and enforcement. The growing permit work load affect's the program's ability to support compliance and enforcement. To the extent that the front end of the program can be streamlined, more resources can be focused on other aspects of the permit program. Consider also that in fiscal year 2002 alone, States completed 41,791 inspections, investigations, and audits of regulated facilities.
- The nature of the permit universe is changing in character and the workload is increasing dramatically. States must now not only deal with traditional municipal and industrial discharges, but also hundreds of thousands of sources related to construction, urban runoff, animal feeding operations, etc.

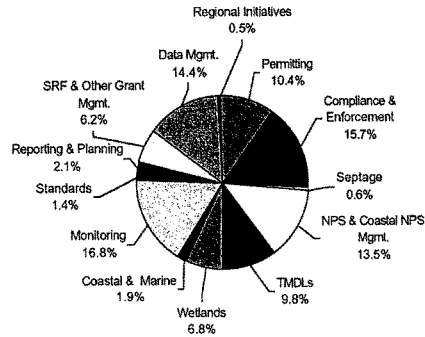
Figure 1. Growth of the NPDES Program (number of facilities or sources)



Since the inception of the NPDES program, the number of facilities required to have NPDES permits has quadrupled. USEPA expects this universe to continue to grow, especially with implementation of the new Stormwater and CAFO requirements.

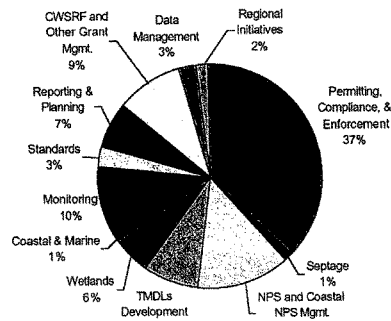
- This increase in the total number of facilities covered under the NPDES permitting program has outpaced the resources invested into the Water Programs. The resource funding gap in the nation's Clean Water Program has a significant impact on the States' ability to meet expectations.

**Figure 2. National Average Resource Need for Water Quality (by program area)**



Of the \$700-\$900 million resource gap, \$110-\$142 million is needed to meet the needs of the compliance and enforcement aspects of the program. The NPDES programs in the States have roughly a 50% shortfall.

**Figure 3. State Expenditures for Water Quality Management**



States spend approximately \$750-\$800 million dollars a year on the Water Program. By far, Permitting, Compliance and Enforcement is the largest component accounting for \$275-\$300 million.

### **COMPLIANCE AND ENFORCEMENT**

Compliance with the requirements of the Clean Water Act is the underpinning of the statute and the implementing regulations.

An effective compliance/enforcement program should:

- Achieve environmental results,
- Protect human health and the environment,
- Assure that water quality violations are promptly corrected,
- Ensure that criminal behavior is identified and punished.

States seek to maximize compliance by employing integrated approaches of compliance assistance, compliance incentives, inspections, and traditional regulatory enforcement. As the first USEPA Administrator Bill Ruckelshaus once said "The best enforcement response is the one that produces and maintains compliance in the most efficient and timely manner...the one that will result in cleaner water..."

#### **Compliance Assistance**

Compliance assistance is intended to support the regulated community with their efforts to meet their environmental obligations. Because the programs are designed to first assume voluntary compliance with the requirements of the law, States and USEPA have developed educational materials and other related tools to educate and support the industry and government sectors' efforts to meet the statutory mandates. The regulated community is frequently comprised of small towns and small businesses, which are new to the permit program. As a part of compliance assistance, States also partner with other providers of assistance such as local governments, trade associations, non-profit organizations, and academia. It is important to note that compliance assistance usually starts well before a violation occurs or a rule is finalized, be it education, outreach, or advocacy. Information and education at the outset is preferable to remedial outreach, though compliance assistance can also occur where an onsite inspector makes helpful recommendations.

For example, the State of Washington has shifted toward more compliance assistance before taking an enforcement action. Almost all permittee contacts initially begin as compliance assistance, if this fails they escalate through informal enforcement, to formal enforcement, unless there is an acute threat to human health, or the environment. There is a considerable effort providing compliance assistance to new permittees and when new general permits are issued.

Kansas tries to educate by up-front technical assistance to avoid problems to begin with. The violations they see, by and large are not intentional or reckless. They provide assistance in the form of on-site visits or electronic means. In addition they provide technical assistance after an enforcement action to try to bring the violator in compliance and hopefully reduce chronic

noncompliance. Ninety percent of Kansas communities are small towns which depend on the State to help explain the rules and requirements they must meet. When the State sets up a regulatory program they consider the capabilities and nature of the entities to be regulated.

In the field, Louisiana inspectors may refer a facility to the State's Small Business Assistance Group or the Louisiana Rural Water Association.

Recently Tennessee held workshop training for over 2000 persons on permit requirements for erosion prevention/sediment control. Nationally the number of people that need to hear this message is well over 200,000.

Over the years, I have heard our members refer to an enforcement action as a failure. This is because a successful program is one in which compliance is achieved in a positive and cooperative manner, one where the "stick" is not necessary to achieve environmental results or the tool of first choice.

Be it technical assistance, good facility site design, knowledgeable operations professionals, better training, or adequate financing, the presence of these varied methods to enhance compliance indicates a healthy, effective and successful program.

Some States have found that they are unable to offer compliance assistance in situations where in the past it was deemed successful. This is because States simply do not have the necessary fiscal and technical resources available to continue to provide the level of support in years past.

For example, in Arizona, a 30% budget cut has forced the Water Program to focus only on the highest priority goals that can realistically be accomplished. Compliance assistance, beyond simple educational tools, can be very labor intensive and may require personal attention to individual facilities. When neither the human resources nor the time are available, the focus must shift to formal enforcement, generally prioritized by risk.

North Carolina did a study several years ago about the use of technical assistance and documented increased compliance where they had increased levels of technical assistance. The issue for them is funding to support such activities at a greater level than they currently can supply.

#### **Compliance Incentives**

Compliance incentives are policies that States have created to eliminate, reduce, or waive the need for penalties. This process is limited to business, industry, and government facilities that discover, promptly disclose, and expeditiously correct environmental insults. Allowing States to customize a compliance or enforcement response to a particular violation, based on honorable intent and demonstrated commitment to improvement, has proven to be of enormous benefit and enables States and facilities to get to the end goal faster. By accepting and recognizing voluntary disclosure, States are able to quickly address environmental hazards and encourage accountability. Clearly this type of response is not appropriate in all circumstances and the

permitting authority must be cognizant of the corporate culture of the dischargers and the historic track record for follow through and commitment.

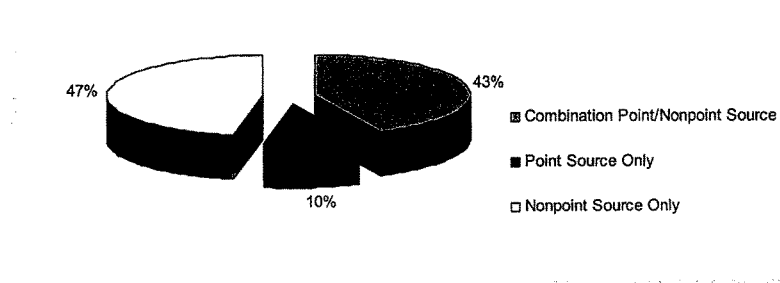
#### **Traditional Regulatory Enforcement**

Traditional regulatory enforcement, at both the State and National levels, has been under attack recently. Consider that hundreds of billions of dollars have been spent the past 30 years on building and upgrading wastewater treatment facilities and that over 135,000 discharge permits have been issued, yet nearly 40% of the nation's assessed waters are not meeting water quality standards. The inference could be that ineffective enforcement programs are the cause of the impaired waters, but it is not that simple.

The reality is that State programs have been very effective at enforcing and achieving compliance for municipal and industrial point sources. Only a very small percentage of the remaining impaired water bodies can be attributed to point sources that are regulated and enforced under the NPDES program.

In Utah for example, only 0.9% of assessed streams and lakes are impaired by industrial point sources and 0.5% by urban runoff. Most of Utah's impairments come from natural sources, nonpoint sources, or other sources not regulated under the NPDES program. Although the numbers may be higher in some other States, it is well established that the majority of impairments across the nation are from non-point sources of pollution.

**Figure 4. Sources of Impairment by Category from the 1998 § 303(d) List**



**Figure 7. Leading Causes/Sources of Impairments in Assessed Rivers, Lakes, and Estuaries**

	<b>Rivers and Stream</b>	<b>Lakes, Ponds, &amp; Reservoirs</b>	<b>Estuaries</b>
<b>Leading Causes</b>	<b>Pathogens (Bacteria)</b>	<b>Nutrients</b>	<b>Metals (Primary Mercury)</b>
	<b>Siltation (Sedimentation)</b>	<b>Metals (Primary Mercury)</b>	<b>Pesticides</b>
	<b>Habitat Alterations</b>	<b>Siltation (Sedimentation)</b>	<b>Oxygen Depleting Substances</b>
<b>Leading Sources*</b>	<b>Agriculture</b>	<b>Agriculture</b>	<b>Municipal Point Sources</b>
	<b>Hydrologic Modification</b>	<b>Hydrologic Modification</b>	<b>Urban Runoff/Storm Sewers</b>
	<b>Habitat Modifications</b>	<b>Urban Runoff/Storm Sewers</b>	<b>Industrial Discharges</b>

\* Excluding unknown, natural, "other" sources.

It is important to highlight that in some States, an increase in the traditional regulatory enforcement has become an effective deterrent. For example, the State of California passed a law, three years ago, creating a mandatory minimum of \$3,000 a day for a permit violation. This legislation focused State attention on the traditional enforcement model and away from post violation compliance assistance. Over the past three years, California's permit violations have fallen considerably.

One tool Georgia uses is a "Zero Tolerance" policy that "insisted that regulatory initiatives be put in place to ensure polluters whether public or private are identified and that appropriate penalties are levied in order to correct problems". This strategy applies to sensitive areas where water quality is stressed due to a high rate of growth. A monetary penalty is required for any permit violation or sewer system overflow. Over 100 formal enforcement actions have been taken each year.

For facilities that have a history of noncompliance, North Carolina can ratchet up the penalties each month. And they use Special Orders by Consent to codify schedules that are enforceable and incorporate stipulated penalties for missed schedules or noncompliance.

#### **ENFORCEMENT MEASURES**

In the four previous examples, California and Utah successes were reviewed using different variables. Utah focused on impairments to water quality standards while California focused on a significant reduction in permit violations. Georgia and North Carolina took a special approach for particular circumstances. These represent four different strategies which when used alone or in combination get to the same end point. A key factor to providing environmental protection is assuring State flexibility to tailor their programs to the local conditions and to promote discharger compliance through increasingly effective monitoring and compliance assessment.



### **Permit Compliance System**

The backbone of the compliance and enforcement programs must be the effective collection and representation of water quality data. The Permit Compliance System (PCS) is the "USEPA computerized database of information on water discharge permits, designed to support the NPDES program." It is this system that is used to track and evaluate the progress of the NPDES program, including the status of enforcement and compliance.

It is the view of most States that the PCS is ineffective, inaccurate and inadequate to meet the needs of an ever growing and complex water permitting and enforcement program. PCS modernization has been a priority of our association for more than a decade and we are pleased to note that the Agency is moving forward with this important task.

There is full agreement that PCS is overly complicated, obsolete, user unfriendly, unorthodox, consistently down, and unusable for data entry. A large percentage of the violations included in a statistical analysis are actually false or are non-reporting violations resulting from missing data and are not actual water quality violations.

For example, in Utah the report shows a compliance rate of 65% for FY 1999. However, in going back and filling in the missing data and based on the Office of the Inspector General's definition, the actual compliance rate is 94%. Unfortunately, many States must rely on this Federal database to manage the NPDES program.

Forcing States to continue to input data in an ineffective system is complicating State and Federal efforts to effectively and accurately represent the status of the clean water programs. It is unfortunate that PCS, a clearly inadequate and undependable database, is currently being used by USEPA (and others) to evaluate State performance.

Mr. Chairman, it is even more troubling to note that this system is not equipped to handle stormwater permits, minor facilities, or to flag toxicity violations. This should not be a reflection of State enforcement performance. Rather, the system is a reflection of USEPA's failure to fulfill its technical support function to supply the necessary tools to the States in order to effectively administer the program.

ASIWPCA fully endorses the Office of Inspector General's (OIG) recommendation and prioritization to overhaul PCS. States cannot emphasize enough how important this priority must become for the integrity of the clean water programs.

### **Compliance Monitoring**

States have long realized the importance of water quality monitoring to their overall water quality programs. Data gathered through monitoring is critical to making scientifically based determinations about the status of a State's water resources, the extent of water quality impairments, and appropriate solutions. Compliance monitoring specifically focuses on the control of long-term water quality, the quality of receiving waters as determined by testing

effluents, and the maintenance of standards during and after construction of a project. (I have attached for the record a recent article of mine that was published by the Environmental Law Institute and a power point summary of the recent ASIWPCA membership survey on water quality monitoring).

#### **Watch List**

One new mechanism the Office of Enforcement and Compliance Assurance has introduced is a Watch List. Basically, this is a list of target facilities in "significant noncompliance" (SNC). The designation refers to various violations of requirements that USEPA "deems the most serious and that may pose a more severe level of environmental threat," according to agency documents. In addition, the Agency is adopting "pilot" CWA criteria that encompass "violations with potential for serious environmental impact," including a serious, one-time release without enforcement, which USEPA defines as a reported daily measurement more than 200 percent above the permitted level.

States are greatly concerned by the creation of this list as it might possibly lead to use as an Enforcement Measure. This list would highlight for USEPA, and potentially others, those States who, in USEPA's view, are not implementing successful compliance and enforcement programs. While on the face of it, this may seem logical to some, those of us who work for and with the State environmental agencies know that there are many pitfalls in the development of such a list. My colleague Steve Thompson has effectively outlined the States' concerns with the Watch List in his testimony and the Association concurs and supports the points he has made before the Committee.

It is our position that if USEPA believes a State is not carrying out timely and appropriate enforcement actions, the Agency should first advise the State of their concern. The State should then be given the opportunity to take appropriate action. If a State fails to follow-up then USEPA should be able to step in and take action.

#### **ENFORCEMENT OPERATIONS**

States and USEPA work to use their combined resources to achieve the greatest environmental results possible. This collaboration occurs through different mechanisms including the Memorandum of Agreement (MOA), Memorandum of Understanding (MOU), Performance Partnership Agreement (PPA), and Performance Partnership Grant (PPG) agreement.

In these processes, USEPA and State officials sit down to discuss environmental conditions and program needs, agree on goals and priorities, devise strategies for addressing priority needs, decide what the roles and responsibilities of each partner will be, and decide how they will measure progress within the national framework.

For example, North Carolina splits the wetland ditching and draining cases with USEPA, because of the large workload associated with those cases. That has worked well.

USEPA needs to be far more communicative than they used to be. State/USEPA advance coordination is needed to plan ahead and undertake "work sharing." This should be a standard way of doing business, rather than being at the mercy or whim of individuals.

Often this process is time consuming and cumbersome and States are in agreement that internal USEPA enforcement operations must be streamlined and consolidated. One important example of streamlining would be the reintegration of the enforcement and compliance function back into specific media programs. Although States appreciate the necessity of having a national enforcement perspective at USEPA, they are opposed to having enforcement as a separate entity. States have found that there is a programmatic disconnect and an unnecessary hurdle to achieving the CWA goals.

Mr. Chairman, I have worked with or for the USEPA for the majority of my adult life. I have seen the Agency structured to include enforcement as an integral part of the environmental media programs, and I have seen and worked with the current structure where enforcement is separate and apart from the program decision making process.

Within most States, enforcement is organizationally located within the water programs, which allows for priority setting across the entire spectrum of water quality concerns and smoother less disjointed program operations. This is not the case nationally, which greatly interferes with the potential success of the collaboration efforts.

Aside from the "optics" of having a separate enforcement function, I personally can see no justification for such a bifurcated structure. As currently organized, USEPA and its enforcement activities are costly, uncoordinated, inefficient, and often governed as much by turf, access and budgets as by environmental protection. History has clearly demonstrated that the most effective structure is one where the enforcement function is well integrated into the media specific programs.

#### **Federal Facilities and Cross Jurisdictional Concerns**

USEPA should do a better job of ensuring compliance for the facilities they regulate (e.g., Federal facilities, Tribes). They could use more authority to take enforcement against other Federal agencies. When States try to address such violations, they run into the issue of sovereign immunity and cannot charge administrative penalties. They have a hard time getting a Federal agency to acknowledge that the State has jurisdiction to require corrective action.

Cross jurisdictional coordination is also an issue. For example, there is an enforcement action for Cincinnati that involves 250 CSOs on the Ohio River. On the other side of the river is another State in another USEPA Region with 100 CSO's. Obviously, the States and USEPA Regions need to dialogue as they carry out their responsibilities. It is hard to compel a large urban center to address environmental impacts in a unified manner if there is a disconnect.

**Overfiling**

Although this varies from Region to Region, many States do feel they have been successful at developing good relationships regarding enforcement actions and "federal overfiling". Typically, it is during the work plan negotiations that States and Regions will work cooperatively to define what cases they each will pursue, and if USEPA intends to "overfile."

Unfortunately, not all States' experiences are positive. Some States have noted changes in USEPA's approach to collaborative efforts. In these situations, USEPA has unilaterally dismissed long-standing agreements and has pursued action on its own, absent State input or concurrence. Such actions go against the premise of federalism and the co-regulator relationship.

States believe USEPA should only utilize its administrative penalty powers under § 309 if a State has failed to take sufficient enforcement action for a violation of the Clean Water Act. And, as J.P. Suarez committed when speaking to a group of State officials, USEPA should consult with the State in advance of an overfiling action. Further, USEPA should give the State the first opportunity to take additional enforcement actions when appropriate. Finally, USEPA should consider the State's enforcement record and not just isolated cases or situations in making a decision to pursue administrative penalties and to determine the sufficiency of a State's enforcement program.

**WORK LOAD AND FUNDING**

Funding for State environmental protection over the years has been inconsistent and generally inadequate. Along with program management, States have been faced with the daunting job of bringing their municipalities into compliance, spending hundreds of billions of dollars on sewage treatment and stormwater abatement.

As indicated, ASIWPCA members believe that the continued lack of resources impacts the mechanisms by which States can achieve compliance. A balanced NPDES program is important as well as a more adequately funded program. To the extent that it is difficult to keep up with the permit work load, the compliance goal will not receive the attention due. To the extent that States are not able to give enough attention to compliance assistance, there will be enforcement problems. States wish to stress that good public policy dictates that "Black hat" regulatory programs need to stay separate from "white hat" incentive/assistance programs. And, a well-funded enforcement program is essential to addressing pollution problems at the State level.

**THE FUTURE**

There is some discussion that the traditional mechanism for viewing enforcement is outdated. From the outset, these systems were created to identify violations through some regularized inspection schedule, and included reporting requirements. When the system identified

reviewable violations, States and/or USEPA made a decision regarding an enforcement response. This system ensured that the worst violations were identified promptly. Although States and USEPA have varied in the types of responses to violations, this basic pattern of reaction survived.

USEPA recently introduced "Smart Enforcement" as the next big step in moving forward with the enforcement compliance programs. "Smart enforcement" focuses on addressing some of the largest emitters of water pollution, using scientific data to make strategic decisions for better utilization of resources, using the most appropriate tool to achieve the best outcome, and effectively communicating the environmental, public health and compliance outcomes of our activities to enhance program effectiveness. USEPA sees "Smart Enforcement" as a common sense approach to problem solving and decision-making, and the States would agree that the philosophy is improving. However, despite its past successes, the reactive approach may no longer be the best way to achieve continuing environmental improvement.

Many States believe that there needs to be a major shift in setting measurable environmental and compliance goals before doing the work to achieve them. The process of setting measurable goals lays bare the assumptions and choices that are otherwise hidden in our selection of work. Are we prepared to have 5% of our streams be contaminated but not 10%? Is 5% even scientifically achievable and what are the fiscal investments for this level of success? Is 80% compliance with toxic emission standards acceptable or do we demand 99%? What are the implications if point sources are de minimis contributors to a problem? These choices are already being made, whether expressly or not. The use of measurable goals announces our intention to exercise control over the choices rather than let them control us.

The philosophical change suggested here is occurring in areas of law enforcement. We have recently seen encouraging stories about declining crime rates resulting from a change in the approaches to police work. Instead of simply responding to a call for help, i.e. reacting to crime one instance at a time, police are increasingly analyzing patterns of crime and looking for causes that can be changed. USEPA can be both motivated and informed by the experiences of other enforcement agencies.

For our part, the State Water Pollution Control Administrators will be working to:

- Streamline and innovative permit issuance in order to meet the dramatically increased permit universe and make use of the e-business tool available.
- Work with USEPA to manage the work load based on the impact permits have on the environment (a risk based approach).
- Improve and clean up data systems and make them more user friendly.
- Better train NPDES program staff, in anticipation of an over 30% staff turnover due to retirements over the next few years.
- Advocate a more proactive, measurable results approach toward compliance and enforcement.

**CLOSING**

Mr. Chairmen the public wants our assurances that their water is clean and safe. The public wants to know that they are protected. Yet the economic side of the environmental equation dictates frugality and incremental improvement. On the one hand, we have statutory mandates and deadlines. On the other hand, we have declining budgets and competing priorities

As the States strive to keep this all in balance they know that their primary responsibility is to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

States are committed to achieving the requirements of the law and to meeting our own strategic goal of Clean Water Everywhere for Everyone. (ASIWPCA Strategic Plan is provided for the record).

At the same time, our membership is faced with serious financial deficits and stressors on their environmental programs. It is critically important that States continue to increase their efforts to address enforcement issues and that they be granted the flexibility to seek out and utilize common sense solutions.

USEPA and States share a commitment to protecting the environment and we agree that our resources should be used as effectively as possible to address the highest priorities. The pressure to account for results is growing: both partners and critics of USEPA and States have been urging us forward and now the Government Performance Results Act requires it.

Thank you Mr. Chairman and members of the Subcommittee for your attention to the enforcement aspects of the Clean Water Act. The State and Interstate Water Quality Agency officials thank you for the opportunity to appear before you today to present their perspectives and recommendations.

Mr. OSE. Our next witness is Dr. Shelley Metzenbaum, who joins us as the director of the Environmental Compliance Consortium.

Dr. Metzenbaum, welcome. You are recognized for 5 minutes.

**STATEMENT OF SHELLEY METZENBAUM, DIRECTOR,  
ENVIRONMENTAL COMPLIANCE CONSORTIUM**

Dr. METZENBAUM. Thank you. Chairman Ose, Congressman Tierney, thank you very much for the opportunity to speak to you today.

My comments today focus on a critical but sorely underdeveloped aspect of the environmental-protection system, the management of environmental information.

Simply stated, we do not make enough use of information that we already collect or information that we could get for a small additional cost. As a result, we miss opportunities to make the environmental protection system more protective, effective and efficient.

In recent years, EPA and several States have made significant developments in this area, but they are the exception rather than the rule. That needs to change.

EPA and the States, hopefully with strong bipartisan support from Congress, need to make it a priority to collect, analyze and disseminate environmental performance information; not just the data, but the analyses as well.

It is the analysis that finds successful programs which can be studied to figure out why they are successful. It is the analysis that points to areas that need attention.

My statement today reflects insights I've acquired as the director of the Environmental Compliance Consortium.

The Consortium is a collaborative effort of State environmental protection agencies seeking better ways to measure, manage and communicate what they do and what they accomplish, especially about their compliance and enforcement programs.

I share with you today my personal views, not the official views of the Consortium.

I want to draw your attention to two promising developments in the use of performance measurements; the Clean Charles 2005 initiative, which Chairman Ose referred to earlier, and OECA's recent pilot performance analysis. My written statements discusses several other examples of noteworthy developments in the States.

In 1995 the New England office of the EPA decided that the piecemeal way it was approaching enforcement did not make sense.

In one geographic area, the Charles River, it decided to break away from looking at enforcement on a case-by-case basis, and focus instead on improving water quality. The regional office set a goal that the lower Charles River would be swimmable in 10 years.

To achieve that goal, it needed to know how clean the river was. It found that information, not in its own data bases nor in the State's, but on the Web site of the local watershed association.

The watershed association measured water quality at 37 points along the 80-mile stretch of the river once a month, and every month EPA studied the data. In fact, the team leaders of the Clean Charles 2005 Initiative are in the room behind me.

When a downstream monitor showed a worse reading than an upstream one, which could not be explained by permitted discharge between the two points, that narrowed the search for problems to the area between the two points. EPA and the local jurisdiction then walked the pipes to find the problems.

EPA found numerous illegal hookups to the storm sewer system and grease balls that were at the juncture between the storm and the wastewater systems, routing water that should have gone into the wastewater systems, untreated out into the river. About a million gallons a day of raw sewage were going directly into the river each day.

When EPA found the problem, it responded with tools appropriate to the problem; a warning letter, technical assistance, enforcement when it was needed, whatever was appropriate to the situation.

The results of this change in EPA's approach were measurable. In 1995 the river was swimmable 19 percent of the time. Five years later it was swimmable 65 percent of the time.

It's worth noting that EPA would never have found these problems if it had done its business the traditional way, sending inspectors out to permitted facilities; because the problems that it found this way showed up in unpermitted facilities, which hadn't even bothered to file for their permits.

Now, about EPA's recent pilot performance analysis and the Watch List, this is a giant step in the right direction; and EPA is to be commended for this work. It's very useful for EPA to analyze EPA and State data to find variations that tell important stories. EPA should do much more of it.

As a Federal agency, EPA is uniquely positioned to enhance the value of information it and the States collect.

Unfortunately, this EPA analysis is currently only for internal use. EPA may be planning to share this information with the States, but not with the public. Limiting distribution of this information creates huge opportunity losses.

I can appreciate EPA's reluctance to make the analysis public. Problems will undoubtedly arise when they first release it.

The problems are not likely to be fixed, however, without public distribution of EPA analyses on a routine basis. Preparing and distributing this sort of analysis should become central to the way EPA and the States do business.

Finally, I'd like to add two cautionary notes.

First, information does not need to be perfect to be useful. Congress and the EPA should not let the perfect be the enemy of the good.

Second, I urge EPA to adopt a performance-focused, information-driven way of doing business. An information-driven system depends on information. Many current efforts to reduce regulatory reporting are counterproductive.

I thank you for this opportunity to share my views.

Mr. OSE. Thank you, Dr. Metzenbaum.

[The prepared statement of Dr. Metzenbaum follows:]



TESTIMONY OF  
DR. SHELLEY H. METZENBAUM  
BEFORE THE  
HOUSE COMMITTEE ON GOVERNMENT REFORM  
SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES, AND  
REGULATORY AFFAIRS  
HEARING ON EPA AND STATE ENFORCEMENT OF WATER LAWS  
OCTOBER 14, 2003  
IPSWICH, MA

Chairman Ose, Congressman Tierney, and members of the Subcommittee:

Thank you for the opportunity to appear before you today. My comments today focus on a critical but sorely under-developed aspect of the environmental protection system – the management of environmental information. I will address specifically information that could be used to increase compliance with environmental laws and motivate facilities to take environmentally protective actions beyond those required by law. Simply stated, we do not make enough use of readily available or affordably obtainable information to find environmental problems, assess their severity, set priorities, gauge the effectiveness of actions taken to address the problems, communicate choices, and motivate environmental improvements. As a result, we miss opportunities to make the environmental protection system more protective, effective, and efficient.

In recent years, there have been promising developments in this area in EPA and several states. They are the exception, however, rather than the rule. That needs to change. EPA and states, with wholehearted and bi-partisan support from Congress, need to make the generation, collection, analysis, and dissemination of environmental and program performance information a priority, providing that information not only at the national or statewide level, but broken down into enough detail that performance variations can be seen. Finding these variations is critical to program improvement,

because they point to successful program interventions worthy of replication, as well as problem areas needing adjustment or increased attention.

**The Environmental Compliance Consortium.** My statement today reflects insights I have acquired as the director of the Environmental Compliance Consortium, a collaborative effort among state environmental protection agencies to find better ways to measure, manage, and communicate the performance of their environmental protection programs. The Consortium focuses primarily on environmental compliance and enforcement programs because measurement issues have so long plagued this aspect of environmental protection. I share with you today my personal views, not the official views of the Consortium.

**The Problem of “Enforcement Beans.”** The Environmental Compliance Consortium was started in 1998 to tackle what is often described as the “enforcement beans” problem. EPA and states have long been taken to task, sometimes for good reason, when their enforcement numbers drop. Declining numbers of enforcement actions should indeed trigger concern when they result from falling inspection levels or inadequate responses to violations. Declining enforcement may also indicate the opposite, however, that a program has achieved a high level of compliance.

The “enforcement bean” problem is complicated when agency management or external watchdogs closely monitor enforcement numbers as the primary indicator of program performance. When that is the case, even when enforcement targets are not formally established, agency staff tend to assume they must meet or exceed the previous year’s enforcement levels. This can create a pressure to find enforcement cases just to meet the target, causing cases that might have been handled more appropriately without enforcement to get an enforcement response. An analogy can be made to highway departments that count traffic tickets issued or fines collected as performance indicators. Traffic tickets, we know, can rise at the end of each counting period in the push to meet actual or implied quotas. And at the same time, the drive to reach a target number of tickets can divert resources from other efforts that might advance program objectives,

such as reducing the costs and consequences of accidents, in a more cost-effective manner.

Despite widespread recognition of the limits of “enforcement beans,” they have remained remarkably persistent over the years as a dominant indicator of the performance of environmental regulatory agencies. Why? For one thing, tracking enforcement actions can trigger valuable follow-up questions, when sudden declines occur, to determine whether the decline reflects progress or a problem. When the tracking is done at the regional level, it can reveal variations that may need management attention, especially if they reflect differences in the enforcement proclivities of individual inspectors that create inequities among regulated parties. Also, declining enforcement levels can have a negative signaling effect on the regulated community, prompting some to relax their attention to compliance.

**The Need for “More Nutritious Beans.”** But the main reason enforcement beans persist is that it is difficult to replace something with nothing. Efforts to determine whether or not drops in enforcement activity suggest a problem have long been impeded by the absence of a complementary or alternative set of indicators that more accurately reflect regulatory performance. When the Compliance Consortium began, neither EPA nor the states could provide compelling data to demonstrate when sliding enforcement levels reflected program progress. In creating the Consortium, states joined together to tackle the “enforcement beans” problem by identifying and developing more accurate and useful indicators for the performance of their compliance and enforcement programs.

In recent years, both states and EPA have identified a number of “more nutritious beans” they can use to provide a much more accurate sense of program progress and problems. These include information about environmental conditions; emissions, releases, and discharges; findings of non-compliance; environmental incidents and accidents; inspection coverage and findings; and data about the practices of both government and the regulated community. We have also honed our understanding of how this information can be analyzed to strengthen an agency’s diagnostic ability, enabling it to pinpoint problems, assess their severity, and gauge the effectiveness of program interventions. Some of these insights are described in an article in the

March/April 2003 issue of the Environmental Law Institute's *Environmental Forum* magazine.

**Enhanced Use of Information.** Government use of this information to guide program decision-making is still, unfortunately, more a possibility than a common practice. Often, key information is already collected, but not organized, analyzed, or disseminated in a format that makes it easy to use. As a consequence, much of the potential value of the information is never realized.

Nor, in most cases, is it made available in a manner that can be easily interpreted. Its inaccessibility prevents a broader range of people – vendors seeking to sell value-adding products to government and regulated parties, academics, the regulated community, interest groups, and even other parts of the same agency or other government organizations – from applying their diverse perspectives and experience to use the information to improve environmental quality. Information inaccessibility also weakens its ability to motivate improved performance by both the regulators and the regulated.

Part of the problem is that much of the collected information resides in paper files or on antiquated computer systems that do not give up information easily, especially in the sort of flexible formats that support diagnostic analysis. Another part of the problem is that, with a few noteworthy exceptions, environmental agency managers have not made information management – its collection, analysis, and dissemination – a strategic priority. Nor has the potential power of information caught the interest of many elected officials, either in the executive or legislative branch. Yet the revolution in information technology calls for a complementary revolution in the way environmental agencies use their information. What was once an intriguing idea that proved too costly to implement now presents itself as a way to achieve, simultaneously, more protective, effective, and efficient environmental programs.

**Noteworthy Developments.** Some noteworthy developments have occurred over the past few years, in states and some parts of EPA, that suggest the enormous potential of better information management in the compliance and enforcement area. Pennsylvania paved the way, in 1997, when it posted all of its inspection data on-line. EPA

subsequently created ECHO. ECHO not only posts environmental compliance history on the web, it also makes it easy to get answers to several commonly asked questions about the data. Illinois, one of the first states to sign a Performance Partnership Agreement with EPA, issued its first environmental self-assessment in 1996. The report has been issued annually since then, and now includes maps that begin to show the relationship between environmental conditions and program requirements. One set of maps, for example, lets the reader see how compliance levels in the wastewater program might be linked to ambient water conditions and the quality of drinking water from wells. Connecticut also issues annual reports, reporting environmental and compliance trends to the public and describing action taken to try to improve them. Delaware now allows interested parties to register, on-line or in a low-tech manner, to be alerted immediately after potentially harmful environmental releases (in excess of permit allowances) occur. Oklahoma has made great progress analyzing and managing its complaints.

I want to draw your attention to three especially promising developments in EPA and the states that illustrate the power of an information-rich approach to environmental decision-making:

- the Clean Charles 2005 initiative,
- the way New Jersey is reaping enormous gains from an integrated data management system, and
- a pilot performance analysis focusing on the National Pollution Discharge Elimination System program carried out by EPA's Office of Enforcement and Compliance Assurance.

#### **Clean Charles 2005 initiative.**

In 1995, following a series of enforcement actions involving facilities discharging into the Charles River in Boston, the New England office of EPA decided to break from its case-by-case approach to compliance assurance and shift its attention to improving the river's water quality. In making this shift, the agency did not pull back from its enforcement and compliance assurance responsibilities; instead, it discovered how intensive use of information helped it improve the environment in a far more protective, effective, and efficient way. With this outcome-focused approach, EPA aggressively

used enforcement when needed, but it also made extensive use of other tools that would never show up in enforcement bean counts – including the threat of enforcement actions, compliance assistance, consultants, memoranda of agreement, convening meetings to encourage learning and brainstorming among peers, and publicity.

EPA set a goal that the Lower Charles River would be swimmable within 10 years. To achieve that goal, EPA realized it needed to know how clean the water already was. EPA did not itself, however, gather water quality data. The state, as part of its watershed planning program, monitored the river's water quality every five years. This information was helpful, but not as "actionable" as EPA needed to meet its ambitious goal. EPA found other data it needed on-line, produced by the Charles River Watershed Association (CRWA.) The watershed association had been knocking on agency doors for years to raise money for monitoring efforts and had finally secured enough funding from EPA, the state, the local treatment works, and its own membership to collect water quality data for 37 points along the eighty-mile stretch of the river every month. It began gathering the data in early 1995, and posted what it gathered on-line soon after its collection.

EPA studied the watershed association's data as soon as it came out each month. The geographic frequency of the data greatly facilitated the agency's search for problems. When a downstream monitor showed a worse reading than the one upstream and it could not be explained by a permitted discharge between the two, it narrowed EPA's search for water quality problems to the area between the two monitors. EPA or the local jurisdiction could then "walk the pipes" to find the cause of the unexplained poor water quality reading.

Soon after it began using this approach, EPA found several illegal hook-ups to the storm sewer system and "grease-balls" clogging the juncture between the storm and wastewater system. Both problems were routing untreated wastewater flows directly to the river. After it found several illegal hook-ups, suggesting a pattern, EPA called on riverside cities and towns to lift storm drain caps on dry days to look for water flows.

The results of this information-intensive approach are telling: in 1995, when the Charles River goal was established, the river was swimmable 19 percent of the time. Five years later, it was swimmable 65 percent of the time. It is estimated that eliminating

illegal hook-ups and juncture blockages cut a million gallons of raw sewage flowing into the river every day.

Had EPA followed its more typical approach to compliance assurance, it would never have found these problems. Typically, EPA and state agencies send their inspectors out to permitted facilities to look for non-compliance problems; few look for those who should hold permits but neglected to obtain them. They are harder-to-find, although probably more egregious violators. By studying geographically and temporally frequent environmental data, EPA found un-permitted violators and it improved water quality.

The ability to look at data each month also allowed EPA to determine if actions it had taken to address the problems it was finding actually increased water quality. When it did, EPA could quickly encourage replication of effective interventions.

Focusing on water quality rather than enforcement levels freed EPA to employ a much broader range of tools to deal with the problems it encountered, without giving preference to one tool over another. The availability of a compelling and credible performance indicator lessened concern about changes in enforcement levels. This freed EPA to match its choice of response tools to the situation at hand. In 1998, EPA sent letters to 200 facilities notifying them that they had been identified as likely sources of pollution (often leaking underground oil tanks and faulty storm drains.) EPA gave them two months to fix the problems. During that two-month period, EPA and the state offered to help the polluters understand how to fix their problems, no questions asked. After that, however, if the problems were not fixed, the sources could expect a visit from inspectors and lawyers. EPA's notification received headline coverage in the paper. Seeing the story, several consultants called EPA and requested the list. EPA was initially reluctant to provide it, but changed its mind. It realized that its small inspection effort had successfully leveraged private sector assistance to promote compliance and environmental gains.

The Clean Charles 2005 initiative is unquestionably a model worthy of replication. It relies on a clearly established and ambitious environmental performance goal, and combines it with credible, fresh, and frequent measurement of progress toward the goal. Also, it regularly reports to the public on its progress, as well as the actions it

has taken or intends to try. This information-rich approach allows EPA to integrate enforcement fully with other compliance enhancing tools. Yet despite a watershed grant initiative launched by former EPA Administrator Whitman, few in EPA or the states have applied the lessons of the Charles in other areas.

Let me make two final observations about the Clean Charles 2005 initiative. First, great gains were realized using water quality data collected by volunteers. These volunteers were trained to follow quality-control procedures, but they were not professionals. Still, the data they gathered provided enormously valuable insights. Information need not be perfect to be useful. Even imperfect measurements can reveal informative performance variations. Former Postmaster General Marvin Runyon recalls when he set up his performance measurement system at the USPS, “My folks said, ‘It won’t be accurate. There could be a forty percent error rate.’ I said, ‘That’s fine. It will at least show me where there is a really bad problem, and we can go to work on that.’”

Second, despite early gains resulting from the identification and correction of previously unknown problems, progress on the Charles has leveled off over the last three years. Interestingly, this has not created a political problem, even among the activists most vocal about cleaning up the Charles. EPA’s continued and visible commitment to the goal partially explains public acceptance of the slowed rate of progress. The region has also taken an exceptionally transparent approach to its management of the initiative, producing and broadcasting not only an annual grade for the river but also lessons about experiments tried and whether or not they worked, as well as plans for the next steps to be taken. This transparency not only informs the public, it engages their assistance and enlists their expertise.

#### **New Jersey Environmental Management System.**

In 1995, the head of the New Jersey Department of Environmental Protection (DEP), Robert Shinn, recognized the need to catch up with the information revolution. He made a strategic decision: information would be central to the way the agency did business. The state, with support from the regulated community, invested in an overhaul of the department’s information system. It invested in a database that integrates nearly all the information the department collects. The New Jersey system links data about



facilities, permits, monitoring records, inspections, violations, enforcement actions, and remediation efforts. It accepts permit applications and monitoring data over the web. Data can be viewed spatially through GIS, together with ambient data for air and water.

The ready availability of information is enabling New Jersey to make changes it has long wanted to make. Prior to system integration, the department couldn't determine how facilities and permitted activities affected a watershed or the areas of greatest noncompliance without querying a dozen databases. When it finally arrived at an answer, it didn't trust it.

Today, New Jersey can generate reports on its most common violations and violators. It can calculate compliance rates and inspection rates for every one of its programs, and for individual sectors in its programs. It is looking at inspection and compliance trends. It has used this analysis to identify sectors needing more attention. It is also looking at whether compliance and inspection rates vary by communities, to determine if it has unintended environmental justice problems. As Sherry Driber, the department's information manager says, "Until now we relied on limited data and instincts to tell us where these problems were. Now we will have the data to confirm or refute these instincts as well as pinpoint new areas of concern and focus our resources accordingly." Driber also notes that "the change achieved a major management goal of having staff develop a greater sense of responsibility for, and control over, the outcome of their inspections."

The *Environmental Forum* article referenced above includes more detailed information about the New Jersey system. Much of the description provided here draws on the section of that article written by Sherry Driber, the department's information manager.

#### **EPA, Performance Analysis, and the Watch List.**

Finally, I want to touch briefly on EPA's efforts to generate a watch list and, more generally, its February 2003 pilot performance analysis. This is terrific. It is a giant step in the right direction. Hopefully, it is the first of many steps toward an increasing role EPA will begin to play analyzing state data and returning it to the states and the public with value-adding information.

On June 6, 2003 the Washington Post ran a front page article “EPA: Few Fined for Polluting Water.” The article was based on a February 2003 EPA analysis of the performance of large wastewater treatment operators. In addition, J.P. Suarez, the current Assistant Administrator of OECA, has announced his intent to create a “watch list.” It is my understanding that this list will identify both recalcitrant violators and the regions and states with the highest number and percentages of those violators. If I am not mistaken, the “watch list” is part of Suarez’s overall “smart enforcement” strategy, as is the pilot performance analysis.

EPA deserves great commendation for its pilot performance analysis. It is just the kind of analysis EPA should be doing – gathering national, regional, and state data, then slicing and dicing it to find stories the data tell. EPA is using these data to trigger useful follow-up questions, look for patterns, and hopefully, identify effective intervention strategies. It is also using them to motivate performance improvements from those on the “watch list.” These analyses build on other analyses OECA has conducted over the past several years, including companion efforts to develop better compliance and enforcement performance metrics.

Unfortunately, to date, OECA has produced these analyses for internal use only. Limiting distribution of the analyses creates huge opportunity losses. It limits its value, because few who might benefit from the analyses can get a copy of it. It limits its usefulness because it prevents others – from elsewhere in EPA, in the states, in the regulated community, and in the public – from adding their own insights, expertise, and experience. And keeping the analyses internal prevents OECA from learning from external critiques, to help it improve subsequent iterations.

I can appreciate EPA’s reluctance to make the analyses public. Problems will undoubtedly arise when the data are first released. Errors will inevitably be found that unfairly embarrass those cited for poor performance – whether regulated parties or the regulators. Even more likely, significant differences in the way regions and states define certain terms and enter data into the systems EPA taps for its underlying data may cause inaccurate findings. States cited this problem when several citizen groups issued reports ranking state performance using data in EPA databases. Moreover, opinions will vary about the appropriate criteria for good performance.

None of these problems are likely to be fixed, however, without routine (at least annual) public dissemination of the analyses. Making the analyses public is likely to speed data corrections and analytic improvements. Early public versions can clearly be released as drafts, explicitly inviting corrections and suggestions and cautioning the media about probable errors. EPA has followed this model in the past.

For ideas about how to move forward, EPA might look to the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) and the successful way they have long handled state data. Building on road surveys begun in the first half of the twentieth century, the FHWA began publishing an annual compendium of *Highway Statistics* in 1945, providing detailed information for each state about the ownership and use of motor vehicles; receipts, expenditures, and road funding mechanisms; and the extent, characteristics, and performance of public highways and local roads. To facilitate more accurate comparisons across states, the FHWA includes in the annual *Highway Statistics* report a section entitled “Selected Measures for Identifying Peer States.”

FHWA also works with the states to build computerized management systems that help states harvest the content of their performance measurement databases to serve state and federal planning needs. Pavement management systems, dating back to the 60’s, help states evaluate alternative investment strategies for specific projects, rank projects for funding based on road conditions, schedule preventive maintenance work, and determine project replacement requirements. In the late 1970’s and early 1980’s, with funding from FHWA, Texas contracted with a vendor to develop a more sophisticated road management system to help it manage its roads. The system is now used in many other states and the successor software is owned by the American Association of State Highway and Transportation Officials. In 1991, FHWA funded a demonstration project for a bridge management system to serve the states.

FHWA plays a role few others could play standardizing data reporting elements, collecting performance information from all the states, organizing the information for easy access by other states, analyzing it in ways that add value beyond what an individual state might learn studying its own experience, and supporting collective state ventures to

enhance state analyses of the information. FHWA has built an information-rich partnership with the states designed to drive continual performance improvement.

NHTSA has built a similarly robust system to improve traffic safety. NHTSA gathers information from every state from police crash reports, coroner's reports, registration data, and other relevant sources to create a complete national database on highway fatalities. To identify effective government interventions, NHTSA studies state-to-state variations in programs and performance. It can, for example, identify states that have the highest percentage of fatalities from drivers running off the road and those with a high rate of fatal accidents from right-angle crashes. Based on the evidence it gathers, NHTSA identifies the strategies most likely to reduce fatalities and injuries, and can also fund and test the effectiveness of new strategies. It routinely and aggressively shares its knowledge with the states. For example, when several states adopted seat belt laws in the early 1980's, it allowed NHTSA to track how those laws affected fatalities. Its analysis revealed that state laws that allowed police to pull people over to check seat belt use resulted in higher seat belt usage and lower fatality rates than those that only allowed police to check for seat belt use when they stopped drivers for other reasons.

Both FHWA and NHTSA have established themselves as expert resources for state and local governments. They collect and disseminate written materials on state practices and progress. They identify more effective practices worthy of replication. Compilation of state information in an easy-to-find and easy-to-use format; analysis tailored to meet the needs of specific audiences – especially the states and others whose actions directly affect the rate of progress; problem and success identification; aggressive packaging and dissemination of raw information, analyses, and materials supporting programs demonstrated to be effective characterize the FHWA's and NHTSA's successful work with the states.

These examples illustrate how EPA and states can harvest greater value from information they already collect or can affordably obtain. Examples such as these are still far too rare. That needs to change. Both EPA and states need to strengthen their skills in using and communicating information about environmental and compliance

Mr. OSE. Our next witness is Mr. Scott Segal, partner of Bracewell & Patterson, LLP.

Welcome, sir; you are recognized for 5 minutes.

**STATEMENT OF SCOTT SEGAL, PARTNER, BRACEWELL & PATTERSON, LLP**

Mr. SEGAL. Chairman Ose, Congressman Tierney, thanks very much for this opportunity to testify.

My name is Scott Segal; I'm at the law firm of Bracewell & Patterson.

For much longer than I've ever intended, I stayed in Washington representing, corporations, yes; some trade associations; and even some non-profits, on various issues of environmental policy.

Special thanks to Mr. Tierney for dragging us out of Washington. Ipswich is beautiful, and it's a beautiful day on top of that. Which reminds me of my first point, the environment in a general sense is getting much better, and we should spend a lot more time in it.

Gregg Easterbrook recently wrote that almost all trends for environmental protection are positive. Specifically with respect to water-quality trends, he said that toxic emissions have declined by 44 percent nationally. Nearly every other trend is positive as well.

In fact, after spending about \$100 billion since the passage of the Clean Water Act in 1972, about 90 percent of Americans live in areas that are served by water systems that haven't had a single health-standard violation; so it's a very good record.

The EPA continues to make a strong commitment to traditional enforcement mechanisms as well as to compliance assurance and programs like the watershed management that you've heard about; some of the things Shelley talked about a moment ago.

I don't know what the number of FTEs, full-time employees, is that have been requested for enforcement, whether was it 170 requested or 154 adjusted or what. I'm not really sure.

All I know is this. Could the number of enforcement staffers working on water issues specifically, or working for the increase for enforcement issues generally, could that number be higher? Yes, it could be higher; absolutely, it could be higher.

But the fact of the matter is, we don't protect the environment or enforce environmental programs in a vacuum. In terms of what our request was for the 2003 budget, the actual number of employees on the Federal payroll in civilian—it may be even higher, I suppose—in civilian capacities went up about 46 percent.

That's because of all the new people that were hired at the Transportation Security Administration; all the people that checked our baggage, probably, for those of us who flew in here.

Why do I bring that up? Let's just say that we don't protect the environment, or advance any other social policy, completely in a vacuum. There are many other things the government is trying to accomplish simultaneously.

I think it's unfair at times to simply observe that numbers are down here, numbers of employees are up here, when the government is attempting to do so many other things and our priorities do change.

Does that mean that environmental protection is not important, or less important? Certainly not. September 11 is just a good exam-

ple of the way in which social policy tends to change, and the allocation particularly of Federal employees tends to change, over time.

2003 was the largest increase, in history of this data being kept at least, for an increase in the number of Federal employees.

A word on what we're talking about when we talk about enforcement of environmental law. Are we really talking about simply a Federal program? Ms. Savage knows that's not the case, and I want to agree with that.

No, of course. In fact, Mr. Thompson's predecessor testified a couple of years ago from ODQ that in fact it is the States which are called upon to do the majority of the work when it comes to enforcing environmental laws.

His predecessor in fact testified that, if EPA begins to aggressively pursue national or regional initiatives without adequately involving the States, there is serious potential for damaging the EPA-State relationship.

It is not some academic exercise regarding federalism here; although it's an important principle, of course. There are significant downsides if the EPA-State relationship is undermined.

The practical impact of undermining States can be to slow down the rate of settlement of environmental cases by reducing the confidence defendants place in the ability of the States to be the final word on a given set of facts.

One practitioner observed, "From the States' perspective, the threat of EPA overfiling State enforcement actions may significantly undermine its ability to obtain effective settlements with regulated entities."

Here's the reason why. The State comes into your place of business and says, you have violated the law; we would like to sign a settlement agreement with you that stipulates what you will do to fix it, and may stipulate a fine.

If you know that the EPA can look at the same set of facts and overfile on the States, then there is simply no sense of finality; and it undermines your confidence to want to sign a settlement agreement. That's a most unfortunate result.

There are of course direct downsides to having inflexible approaches to environmental enforcement. Eric and I made a cottage industry running around the country talking about the Clean Air program, which lasted a couple months.

In that program, pollution-control technologies are discouraged from being implemented and being installed if people believe they will trigger enforcement action; but I promise I won't hijack the hearing to talk about that anymore.

Mr. OSE. You're right about that.

Mr. SEGAL. Too late.

The same is true for Water Act programs as well.

There are examples of an industrial facility having an eye-wash station, which as you know is required by the Occupational Safety and Health Administration, being penalized for being, "an unpermitted water point source to the facility."

Does that go on every day with inspectors? Probably not; but the point is we have to be flexible in the way we implement our enforcement mechanisms. If we simply evaluate every environmental

program by how many fines are issued and how many cases are filed, that's a bad approach.

Looking to the future, what does it hold? For Water Act policy, there are very innovative policies that may obtain. For example, there are water trading programs, watershed management programs; and all of these are important developments for the future.

I want to focus for 1 second on trading. We've heard a lot about trading in the air context; there are also trading programs in the water context.

One thing that I would really hate to have occur is if we ever get to the point—and this maybe gets to Ms. Savage's point about why we need to fold enforcement officers back into the program office at the EPA—if we ever get to the point where enforcement officers can essentially use an existing docket of cases that have already been filed enforcing a particular interpretation of environmental law to avoid clarifying or reforming that underlying environmental program. They would argue that to do so would be a slap in the face of enforcement. If that ever gets to be the case, then enforcement officers will essentially hijack the program officers.

That's a very dangerous proposition. It discourages innovation, and in my judgment discourages environmental protection.

Thank you.

Mr. OSE. Thank you, Mr. Segal.

[The prepared statement of Mr. Segal follows:]

**Statement of Scott H. Segal  
Bracewell & Patterson, L.L.P.  
Before the Subcommittee on Energy Policy, Natural Resources  
and Regulatory Affairs  
Committee on Government Reform  
United States House of Representatives**

**Hearing on the Status of U.S. EPA Enforcement Programs  
Ipswich Town Hall - Ipswich, Massachusetts  
October 14, 2003**

Chairman Ose, Congressman Tierney and Members of the Subcommittee, thank you for this opportunity to testify regarding the current state of EPA enforcement programs. My name is Scott Segal, and I am a partner at the law firm of Bracewell & Patterson. In that capacity, I have represented clients in Washington on environmental policy matters for fourteen years. I have worked with a wide variety of federal agencies, and have become familiar with a number of industrial sectors. I have represented private corporations, trade associations, and non-profit organizations. In addition, I serve on the adjunct faculty of the University of Maryland (University College) in the area of Science and Technology Management. I represent many groups that have taken an active interest in environmental enforcement matters. While I have learned much from these clients, the views I express today are my own.

**1. Indicators of Environmental Protection and Environmental Enforcement are Positive**

In the United States today, we have much to be proud of when we contemplate the success of environmental programs. It should not be surprising that the numbers of fines and lawsuits being brought under environmental statutes has declined, since our environmental efforts have been largely successful over the past three decades. It is clear that substantial environmental progress has been made since the adoption of major control statutes. Gregg Easterbrook, a senior editor at the *New Republic*, wrote recently:

In the past decade...all pollutants regulated by the Clean Air Act have declined nationally. Airborne lead concentrations were down 56 percent during the '90s, sulfur dioxide (the main cause of acid rain) and carbon monoxide ("winter smog") emissions fell 25 percent, nitrogen dioxide (a smog factor) dropped 14 percent, and ground-level ozone fell four percent, even as the consumption of gasoline...has skyrocketed. U.S. water is cleaner as well; the proportion of lakes and rivers classified as "safe for fishing and swimming," about one-third in 1970, is up to about two-thirds. Toxic emissions declined 44 percent nationally in the last decade, even as domestic petrochemical manufacturing rose. Nearly every other trend is positive, too.<sup>1</sup>

<sup>1</sup> Gregg Easterbrook, *Enviros' Bad Math: Sunny Side Up*, New Republic Online (June 19, 2000), available at <http://www.tnr.com/061900/easterbrook061900.html>.



The case of water quality achievement is particularly impressive. Since the adoption of the Clean Water Act in 1972, the United States has spent over \$100 billion in meeting our water quality objectives. Today, twice as many assessed waters meet national goals, and wetlands losses occur at one-quarter the previous rate. When the Act was adopted, sewage treatment plants served only 85 million Americans; today, with the construction of some 14,000 new facilities, 173 million are served. With industrial discharges down over 100 million pounds, 89 percent of the U.S. population is served by water systems reporting no health standard violations.<sup>2</sup>

Additionally, EPA's commitment to a strong enforcement program has shown no indication of weakening, and in fact enforcement programs have been the beneficiaries of much larger budget increases than their compliance-oriented counterparts. For example, in Fiscal Year (FY) 2003 the administration requested an increase of almost \$16 million for enforcement programs, while seeking only an additional \$103.9 thousand for compliance incentives and assistance programs.<sup>3</sup> This trend continued in FY 2004, when the administration requested an increase of almost \$26 million for enforcement programs, compared with an increase of \$2.5 million for compliance incentives and assistance programs.<sup>4</sup> The request for \$26 million in additional funds and more than 170 additional Full-Time Employees dedicated to enforcement efforts reflects EPA's continued commitment to enforcement programs.<sup>5</sup>

A complete analysis of environmental enforcement cannot ignore the fact that while EPA sets standards and priorities, States undertake most enforcement actions. As the Agency has explained to Congress,

State, tribal, and local governments bear much of the responsibility for ensuring compliance, and EPA works in partnership with them and other Federal agencies to promote environmental protection...Coordinating its activities with the states, EPA will continue to support deterrence and compliance activities by focusing its compliance monitoring on site inspections and investigations.<sup>6</sup>

Relying on a strong partnership with state enforcement officials, the goal of cooperative federalism, is not a novel approach to effective environmental protection. In fact, the EPA, during the Clinton Administration, affirmed the leadership role of the states and called for new

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<sup>2</sup> Jack M. Hollander, *The Real Environmental Crisis* (2003) at 103-04.

<sup>3</sup> U.S. EPA, Summary of The EPA's Budget for FY 2003, available at: <http://www.epa.gov/ocfo/budget/2003/2003bib.pdf>

<sup>4</sup> U.S. EPA, 2004 Annual Performance Plan and Congressional Justification, available at: <http://www.epa.gov/ocfo/budget/2004/2004cj.htm>

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

efforts to "improve the capacity of states, localities, and tribes to conduct enforcement and compliance assurance programs."<sup>7</sup>

A cooperative relationship with the states has helped protect the environment over the past three decades. While EPA critics point to the number of enforcement actions and lawsuits, these measures are not a proper tool for judging environmental protection. Mark Coleman, the former Executive Director of the Oklahoma Department of Environmental Quality and Chairman of the Compliance Committee of the Environmental Council of the States (ECOS) testified before the Senate Committee on Environment and Public Works that:

Our main goal is, and should be, reaching the environmental quality goals that Congress and our legislatures have set. No amount of enforcement and compliance activity measures will tell us anything about whether we have met, or will meet, that goal...No state would deny that enforcement is an important and necessary tool. But...an increase in enforcement actions would mean a terrible breakdown in communications between government and regulated communities had occurred. Such a breakdown would mean little chance of improvements in environmental quality.<sup>8</sup>

Furthermore, calling on EPA to centralize enforcement actions and limiting the leadership role of states will not enhance environmental protection. As Mr. Coleman has explained:

Since States have primary responsibility for enforcement in most EPA programs the national enforcement strategy cannot be implemented without active State participation. If EPA begins to aggressively pursue national or Regional initiatives without adequately involving the States, there is serious potential for damaging the EPA/State relationship.<sup>9</sup>

The practical impact of undermining State approaches to enforcement can be to slow down the rate of settlement of environmental cases by reducing the confidence defendants place in the ability of States to be the final word on a given set of facts. One leading practitioner has described the problem in this way, "from the state's perspective, the threat of EPA overfiling [state enforcement actions] may significantly undermine its ability to obtain effective settlements with regulated entities. As there is no guarantee that EPA will not decide to file another

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<sup>7</sup> U.S. EPA, Summary of The EPA's Budget for FY 2000, available at: <http://www.epa.gov/ocfo/budget/2000/2000bib.pdf>

<sup>8</sup> Mark Coleman, *Hearing on the Enforcement of Environmental Laws: Federal State Relations*, Senate Committee on Environment and Public Works (June 10, 1997) available at: <http://www.senate.gov/~epw/105th/coleman.htm>

<sup>9</sup> *Id.*

enforcement action against a company once it has settled with the state, a company's incentives to agree to such a settlement may be significantly diminished.<sup>10</sup>

In sum, EPA has shown a strong commitment to enforcement that is reflected in improved environmental quality, rising enforcement budgets, and a healthy partnership with the States. Three decades of success should not be sacrificed at the altar of statistics, which fail to fully explain the wide range of efforts being undertaken in the environmental arena.

## 2. Downside Consequences to Inflexible Environmental Enforcement

It has often been observed that at the outset of the current federal environmental programs in the early 1970's, our problems were substantial and obvious. It stands to reason that at that time, and for a period following, our environmental enforcement priorities were also fairly obvious. In many ways, as milestones of environmental achievement have been reached, our adversarial enforcement model has not caught up to reflect new realities.

In some respects, we are victims of our own success. As environmental indicators are trending in a positive fashion, the decisions we make as a society become more difficult in the area of allocation of resources. Environmental protection remains just as important, but the tools we use must become more refined. Unfortunately, while many program officers understand the need for changing priorities, enforcement officers often view the world in a binary fashion with little room for subtlety. There is a significant downside consequence to this view, since inflexible enforcement can produce perverse results. As one economist found, strict and harsh penalties undermine a cooperative approach to environmental protection, ultimately resulting in greater environmental damage.<sup>11</sup> We are all familiar with examples that illustrate the law of unintended consequences.<sup>12</sup>

<sup>10</sup> Daniel M. Steinway, The Unsettling Effects of EPA Overfiling in State-Lead Case, originally published in the Outside Perspectives section of CCM - The American Lawyer's Corporate Counsel Magazine (Mar. 1999) available at <http://www.kelleydrye.com/resourcecenter/environmental/articles/1999/3-99%20CCM%20-%20Unsettling%20Effects%20of%20EPA%20Overfilin.PDF>.

<sup>11</sup> Nicola Jones, Heavy Environmental Polluters 'Should Pay Less', New Scientist (August 2002), (interviewing economist and scholar Richard Damania), at <http://www.newscientist.com/news/news.jsp?id=ns99992697>.

<sup>12</sup> Take, for instance, the example of the Stephens' kangaroo rat, a species the government has listed as endangered since 1988. In one enforcement action, the Fish and Wildlife Service (FWS), in compliance with the Endangered Species Act (ESA), prohibited a fifth generation farming family from plowing 800 tillable acres that are considered prime rat habitat. The family, threatened with stiff penalties (*i.e.*, a \$50,000 fine, impoundment of farming equipment, or jail time) for every "taking" of a rat, lost \$75,000 in forgone crops for four years—a total of \$300,000. Because the FWS prohibited the family from farming the land, it became overgrown and caught fire, costing the family even more money. Ironically, in the aftermath of the fire, FWS biologists determined that prohibiting the family from working their land actually

There seems to be a bipartisan consensus that such an inflexible, strictly adversarial approach makes little sense. Then-Vice President Al Gore, in his September 1994 report to President Clinton on the progress of governmental reinvention activities, observed that, "EPA Administrator Carol M. Browner, for instance, is reaching out to all parties with potential roles to play. Environmental protection, she says, can no longer succeed as an adversarial process, with the polluter on one side of the table and the offended party on the other. Now, all parties must sit and work together."<sup>13</sup> Two years later, Vice President Gore revealed the successes that could be achieved when pilot projects were adopted—sometimes over the objections of enforcement officers—such as Project XL and the Common Sense Initiative at EPA. He stated, "EPA has found that when they let companies volunteer to cut pollution without the government dictating how they had to do it, thousands of companies jumped at the chance."<sup>14</sup>

What Vice President Gore and Administrator Browner recognized from their efforts at governmental reform is what is evident today: as the nature of environmental challenges has changed, so too must antiquated notions of a purely adversarial approach to enforcement.

An excellent example of the drawbacks of reflexive enforcement is the enforcement of the New Source Review (NSR) program. An inflexible approach undermines our energy supply, environmental protection, and workplace safety. Because NSR is a costly and time-consuming process, this position discourages utilities from undertaking needed maintenance projects. This makes plants more reliant on deteriorating components, resulting in less efficient, less reliable and higher emitting power generation. As Howard Gruenspecht from the respected environmental think-tank Resources for the Future and Robert Stavins of Harvard University recently wrote:

Research has demonstrated that the New Source Review process drives up costs tremendously (not just for the electricity companies, but for their customers and shareholders, that is, for all of us) and has resulted in worse environmental quality than would have occurred if firms had not faced this disincentive to invest in new, cleaner technologies.

Our environmental enforcement programs must not create disincentives to the very activities calculated to optimize environmental behaviors. At the very least, regulatory authorities should swear a Hippocratic oath; they should do no harm.

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destroyed the critical habitat of the kangaroo rats. Thus, the kangaroo rat left the area before the fire, seeking an amenable habitat elsewhere. See <http://www.cato.org/pubs/regulation/reg16n4h.html>.

<sup>13</sup>Vice President Al Gore, Creating A Government That Works Better and Costs Less (Chapter III - Creative Approaches to Environmental Protection)(September 1994).

<sup>14</sup>Vice President Al Gore, "The Environment" from 1996 Annual Report: The Best Kept Secrets in Government (report to President Clinton regarding Reinvention of Government and the National Performance Review).

### 3. Options for the Future

As discussed, the current enforcement approach is less than optimal, often resulting in greater environmental harm than benefit. Two thoughtful legal observers have articulated a rubric for judging effective environmental enforcement. To be effective, an enforcement regime must:

- ?? be clear in what it mandates and prohibits;
- ?? be predictable in how it punishes violations of the regulations, and rely where possible on cooperative, problem-solving approaches; and,
- ?? seek environmental improvement, not numerical enforcement targets.<sup>15</sup>

If an enforcement system is to succeed in achieving additional compliance, enforcement programs must be less adversarial and of greater real assistance. As one State regulator put it, "the true measure of successful enforcement is in quantifiable improvement in our environment. Improved natural resources, not fines, must be the primary objective of any effective environmental policy." She concluded: "Allowing states to establish, develop, and implement environmental improvement policies is critical to their autonomy and the health of the environment. Heavy fines simply encourage litigation and slow environmental progress."<sup>16</sup>

The best way to serve the principles of clarity, predictability, and real environmental improvement is to pursue flexible and rational enforcement programs. Existing programs can be so confusing and can rely upon contradictory or changing interpretations, greatly reducing the ability of the regulated community to comply.<sup>17</sup> In particular, market-based solutions and compliance assurance programs are the best ways to achieve meaningful environmental protections.

Although command-and-control instruments have dominated environmental regulations over the years, tradable permit systems were used in the 1980s to phase leaded gasoline out of the market and to phase out chlorofluorocarbons (CFCs). Such market-based systems offer significant improvements in environmental quality:

The establishment of tradable lead rights in gasoline not only dramatically reduced the cost of complying with requirements to phase out the use of lead as a fuel additive, but simplified enforcement as well, by eliminating refineries' efforts

<sup>15</sup>Alexander Volokh and Roger Marzulla, *Environmental Enforcement: In Search of Both Effectiveness and Fairness*, RPPI Policy Study No. 210 (Aug. 1996) at <http://www.rppi.org/environment/ps210.html>.

<sup>16</sup>Becky Norton Dunlop, *Environmental Enforcement: Supporting State Efforts to Encourage Voluntary Compliance* at [http://www.adti.net/html\\_files/reg/dd/ddunlop.htm](http://www.adti.net/html_files/reg/dd/ddunlop.htm)

<sup>17</sup> Jonathan H. Adler, *Anti-Environmental Enforcement* (Feb. 1, 1997)(citing "survey of 200 corporate general counsels conducted by the *National Law Journal*" which found that "fewer than one third of the responding attorneys felt that it was possible to comply fully with state and federal environmental laws."), available at <http://www.cei.org/gencon/005.01307.cfm>.

to obtain variances from regulations based on technology and feasibility defenses.<sup>18</sup>

By far, though, the most ambitious and successful market based system has been for the control of acid rain (SO<sub>2</sub>) contained in Title IV of the 1990 Clean Air Act amendments. The acid rain reductions are of special importance because they in part serve as a model for a successful market-based approach to environmental protection. The SO<sub>2</sub> allowance trading system gives utilities flexibility in meeting aggregate emissions reductions goals and may thus allow them to meet those goals at much lower cost than under normal traditional command and control approaches. Title IV has, by all accounts, been highly successful. Gregg Easterbrook wrote last summer that the results have been "spectacular. Acid rain levels fell sharply during the 90's, even as coal combustion (its main cause) increased."<sup>19</sup>

Additionally, greater emphasis must be placed on working with regulated communities to prevent environmental harm by incentivizing compliance, *i.e.*, providing technical assistance and greater regulatory clarity. EPA has already recognized the importance of compliance assurance programs:

To achieve compliance, the regulated community must understand its regulatory obligations and how to comply with those obligations. EPA supports the regulated communities by assuring that requirements are clearly understood and by helping industry discover cost-effective options to comply through the use of pollution prevention and innovative technologies....Maximum compliance requires the active efforts of the regulated community to police itself.<sup>20</sup>

EPA needs to expand these efforts by committing more fully to compliance assistance and incentives. As the New Zealand government found when it undertook a major study of its regulatory approaches realignment of incentives were able to achieve more substantial environmental benefits than command-and-control schemes. "These changes not only made important improvements in the way natural resources, such as fisheries and native forests, were used and managed, but also improved the quality of the nation's air and water."<sup>21</sup>

Analyzing actions undertaken by the New Zealand government, the George Mason University Mercatus Center noted:

EPA should step back from its tradition command-and-control, or regulate-and-enforce, approach to evaluate ways to better align the goals of the regulated community with social goals. The New Zealand approach of (1) studying

<sup>18</sup> George Mason University Mercatus Center, Comments on the Environmental Protection Agency's Environmental Enforcement and Compliance Assurance Activities: Request for Comments, at <http://www.mercatus.org/regulatorystudies/article.php/117.html>.

<sup>19</sup> *Id.*

<sup>20</sup> *Supra* at 3.

<sup>21</sup> *Supra* at 15.

carefully the incentives involved in each situation and (2) determining how those incentives might be realigned to produce the desired outcome resulted in not only an improved outcome but also less invasive procedures by government and a better rapport between regulators and industry.<sup>22</sup>

Developing a compliance approach that works with regulated entities rather than against them is the best way to ensure compliance with environmental laws and regulations. This new enforcement agenda is necessary to place the interests of the environment and the public over the interest of bureaucrats and litigators.

Thank you for this opportunity to offer testimony. I look forward to answering any questions the Subcommittee may have.

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<sup>22</sup> *Id.*

Mr. OSE. Our next witness is Ms. Pam DiBona. She's the vice president for policy of the Environmental League of Massachusetts. You're recognized for 5 minutes.

**STATEMENT OF PAM DIBONA, VICE PRESIDENT FOR POLICY,  
ENVIRONMENTAL LEAGUE OF MASSACHUSETTS**

Ms. DiBONA. Thank you, Chairman Ose and Congressman Tierney, thank you very much for having me here this afternoon to speak about the Clean Water Act enforcement.

As you mentioned, I'm vice president for policy at the Environmental League of Massachusetts. We're an independent statewide nonprofit organization, and we focus on making sure that sound environmental policies are developed and then implemented in the State. We work with more than 50 organizations around the Commonwealth, including many watershed associations.

Before I joined the Environmental League of Massachusetts, I was lucky enough to work at the Charles Watershed Association while the Clean Charles monitoring program was being put together.

I guess one of the core messages from my testimony will be that, before we start talking about handing off all responsibility for enforcement of the Clean Water Act to the States, we might want to look at what the States are doing with their current mandate to enforce.

The Environmental League has looked for several years at the Department of Environmental Protection, which is the agency that's primarily responsible for enforcing the Clean Water Act in Massachusetts; and their history has been spotty.

We've seen decreases in the number of inspectors; we've seen penalties that do not recover the economic benefit that violators have gained by not following the law. The agency also has no idea of how to figure out how many of the facilities are actually in compliance out of the ones that they have in their system.

And then, once they get them into their system with a violation, they don't have a cohesive, comprehensive program for following up on those violations and making sure that they were fixed after the fact.

We're currently updating two previous reports on enforcement by DEP, and we'll have that done by the end of the year. We're happy to pass that on to you when we're done with it, plus give you the 2002 and hopefully 2003 data.

One of the core reasons why enforcement is lacking in Massachusetts, I think, is lack of resources. In the past there has been lack of resources, because they've shifted money from enforcement programs to making sure that permits move along more quickly.

More recently, they've been taking in the resources and moving them, trying to keep enforcement level; but boy, are we seeing changes in how the agency is being funded.

Just in the past 2 fiscal years, they lost 25 percent of their work force, or 289 full-time equivalent employees. We're thinking that in fiscal year 2005, coming up, they'll lose up to another 125 to 150 FTEs.

And I do know from talking to the agencies that having a Federal mandate to enforce the Clean Water Act is one of the only



things that's keeping them on track with enforcement of the Clean Water Act.

They have said to me that, as they look at where they're going to do disinvestments as the budgets are cut, that they're sticking with the federally mandated programs. Things like solid-waste management are going to go by the wayside; because the Federal Government isn't saying, here, you must do this.

So we certainly in the States depend on having Federal mandate and EPA looking over our shoulders to make sure that this is done.

I did want to just mention, while you were all talking about the monitoring on the Charles River, it's far more than the State has done in the past on monitoring, and it did take a nonprofit watershed association to get out and do it; but they also had to raise a lot of money to be able to do it themselves.

And they were very forward-thinking in making sure they were out there, and had the volunteers who were out at 6 a.m. once a month to pick up water samples, come heck or high water.

So I think that before we start talking about how much the environment has improved, or how much water quality is getting better, we really have to make sure that we have some data to back that up.

I don't know that having only 40 percent of our water being assessed gives us the backing to be able to say that our water is getting better.

And then, in my written testimony I did give a few examples in other States of the horror stories that really are happening in other States in terms of enforcement, including a facility in Alabama that had 324 Clean Water Act violations before they were taken to task.

So I hope that this is useful to you as we move ahead.

Mr. OSE. Thank you, Ms. DiBona.

[The prepared statement of Ms. DiBona follows:]



Advocates For Responsible Environmental Policy Since 1898

**Testimony to the Committee on Government Reform, Subcommittee on  
Energy Policy, Natural Resources, and Regulatory Affairs  
Regarding Enforcement of the Clean Water Act**

October 14, 2003

Chairman Ose and Members of the Committee:

My name is Pamela DiBona, I am Vice President for Policy at the Environmental League of Massachusetts, an independent, state-wide, nonprofit advocacy organization dedicated to promoting sound environmental policies – and implementation of those policies – for Massachusetts. Thank you for the opportunity to testify on this important issue.

**Massachusetts has a history of spotty enforcement**

The Environmental League has been assessing enforcement of environmental laws, primarily by our Department of Environmental Protection (DEP), for at least 15 years. In 1996, we released a report (based in part on an EPA assessment) detailing the lack of aggressive enforcement and failure to fully penalize violators of all of the laws, including the state's own Clean Water Act and the federal Clean Water Act (*Enforcement Trends at the Massachusetts Department of Environmental Protection, 1989-1996*, 10 copies submitted to the Committee). More recently, we have prepared an assessment of enforcement activities by DEP between 1996 and 2000 (*Enforcement Trends at the Massachusetts Department of Environmental Protection 1997-2000*, Executive Summary attached). Our findings are not encouraging:

- DEP has reduced their presence in the field, and on-site inspections are not keeping up with the increase in facilities. We're not even finding the violators, let alone taking aggressive action.
- Strategic planning is lacking. For example, DEP is unable to determine rates of compliance with laws it administers, making strategic planning very difficult.
- Average penalty amounts fell between 1996 and 2000, often allowing violators to gain economic benefits by not complying with the law.

We are currently updating our report to include data from 2001 and 2002, and we expect to see some modest gains in strategic compliance monitoring, in part due to the Environmental League's advocacy for more diligence.

### **Clean Water Act enforcement threatened by budget cuts**

More specifically with regard to the federal Clean Water Act, we have found that facilities holding NPDES permits, for the most part, undergo adequate inspections in Massachusetts – two-thirds of the major and minor facilities were inspected in Fiscal Year 2002. While inspections have been kept up, we are concerned that enforcement, especially against municipal violators, is lacking. Here in Ipswich, the town wastewater treatment plant was in non-compliance for many years, and its sewer collection system regularly spewed raw sewage directly into the Ipswich River; yet actions to address these problems have only been implemented (slowly and not completely successfully) in the last few years. When the force main was finally replaced, incidents decreased from four to six incidents per year – but still occasionally occur. A similar violation was ongoing – and ignored -- on the Charles River in the town of Milford.

Even this limited enforcement action is in jeopardy in light of state budget cuts. In the past two fiscal years, DEP has lost 25 percent of its workforce, or 109 FTEs. We expect to see enforcement suffer along with other programs as funding continues to be cut – in FY05, the agency is anticipating another budget cut, with a loss of 125 to 150 FTEs.

We do know that the one thing ensuring adequate enforcement of the Clean Water Act in Massachusetts is the federal mandate to do so. In light of these drastic budget cuts, agency decision-makers have stated that programs that are not federally mandated will be cut from the agency's implementation list. We can only imagine what being "taken off the priority list" really means. Over the past 5 years, with "normal" budgets, permit inspection rates overall have ranged from 5 to 8 percent inspected each year, with only half of those inspections conducted without prior notice. That means a permitted facility can expect an inspection only once every 17 years! If the federal impetus for protection of clean water is taken away, I am sure we will see similar inspection rates of CWA permits.

### **Massachusetts is not alone.**

I would also like to report on enforcement of the Clean Water Act in other states. The Environmental League has worked closely with our counterpart organizations in North Carolina, Alabama, Michigan, Washington, and Oregon for the past three years to conduct comparisons and generate public policy for improved enforcement of existing environmental laws. Here is some of what they have found in their states with regard to CWA enforcement, including some real horror stories:

- Oregon leads the nation in expired wastewater discharge permits – 68 percent of permits have expired. According to its own Web site, Oregon's Department of Environmental Quality has a backlog of 324 wastewater discharge permits waiting to be issued dating back to February of 1989. With recent budget reductions, DEQ will have 25 percent less staff than it needs to reduce the permit backlog, inspect facilities and hold violators accountable.
- North Carolina also has a massive backlog of expired permits. And while the discharge permits that are in place are reasonably inspected, stormwater permits have been all but ignored in the state. In North Carolina, parents discovered that the creek in their backyard where their children played was contaminated with sewage sludge from an upstream treatment plant. The state had not taken enforcement action despite knowing about the problem for 9 years.

- In Alabama, a chicken processing facility is allowed to illegally dump blood, oil and chicken parts into an up-stream tributary of a river on which a popular Girl Scout camp is located. The state allowed this practice to continue even though their own records showed the facility to have 324 water pollution violations.
- Since 1995, the Wisconsin Department of Natural Resources (DNR) has consistently failed to meet its goal to inspect each major industrial facility with a Wisconsin PDES permit once per year. The DNR's inspection record went from apparently perfect in the years 1990 through 1994 to failing to inspect up to 53% of all major industrial facilities in 1999. By comparison, the DNR diligently inspected major municipal facilities until 1998 when it failed to inspect 19% of all major municipal facilities. ( Executive Summary attached
- A Washington state lawyer reports that the Washington Department of Ecology (DoE) virtually refuses to take enforcement actions against industrial stormwater dischargers that should be covered by NPDES permit, but are not. One of the primary stormwater inspectors in DoE reports that their superiors at the agency repeatedly refuse to take any action to force illegally unpermitted industrial stormwater dischargers to come under permit. Separately, an NPDES permit manager there expressed frustration that their superiors repeatedly refused to take any enforcement action against municipal sewage treatment plant permittees that had failed to perform studies or submit reports required by their permits.
- The Michigan Department of Environmental Quality is the only environmental agency in the Great Lakes region that for years refused to require pollution permits for concentrated animal feeding operations(CAFOs) that regularly dump large amounts of animal manure into Michigan rivers. The Michigan chapter of the Sierra Club has gone to court to enforce the federal Clean Water Act because the state won't.

All of these states face similar budget shortfalls to those in Massachusetts – and the problems will only become worse.

### **Conclusion**

We in the states depend on a strong federal presence to keep our waters clean. Even the most progressive states are not upholding their mandate to protect the public trust and common resources. We urge the Committee to make every effort to keep – and strengthen – the federal Clean Water Act.

*Submitted by:*

Pamela DiBona  
Vice President for Policy  
Environmental League of Massachusetts  
14 Beacon Street, Suite 714  
Boston MA 02108

Mr. OSE. Our next witness is Mr. J. Charles Fox, who is the vice president of public affairs of the Chesapeake Bay Foundation.

Sir, you're recognized for 5 minutes. Welcome.

**STATEMENT OF J. CHARLES FOX, VICE PRESIDENT OF PUBLIC AFFAIRS, CHESAPEAKE BAY FOUNDATION**

Mr. FOX. Thank you, Mr. Chairman and Mr. Tierney. I appreciate the invitation to appear today.

Before joining the Chesapeake Bay Foundation, I had the pleasure and privilege of serving the Secretary of Natural Resources in the State of Maryland, as Robbi had suggested, the former Assistant Administrator for Water in the Clinton administration.

The Clean Water Act, no question, has been responsible for tremendous reductions in pollution over the past 30 years; but I would really differ with Mr. Segal, and suggest that our Nation has made surprisingly little progress in meeting the fundamental goals and requirements of the act.

Lack of enforcement is the key reason for this limited progress.

At one level, we've heard from a number of witnesses today, enforcement is the means by which government assures that the permit terms are met by dischargers. At another, more important, level, I would argue, enforcement is also the obligation of the States and the EPA to implement the act's basic requirements.

Why is this distinction important? In Chesapeake Bay, if every permitted discharge were fully compliant with its permit terms, Chesapeake Bay still would not come close to meeting water-quality standards. Unfortunately, I believe our experience is not unique.

The simple fact is that permit limitations themselves are not sufficiently stringent to protect water quality, and the States and EPA are ignoring fundamental Clean Water Act responsibilities in far too many cases.

The Clean Water Act requires that all point sources of discharges of pollution have a permit that is sufficiently stringent to meet water-quality standards. The act established a two part strategy to achieve this.

First, the permits include so-called technology limits which are based upon national-level regulation for categories of discharges.

Second, the permits should be further strengthened, if that is necessary in order to meet State water-quality standards.

It is the second step that has been so poorly implemented, in my opinion, by the States and the EPA; and, the results are painfully obvious.

Over the past decade or more, our Nation's water quality has not improved; and, many indicators suggest that water quality is worsening.

In the Chesapeake Bay, monitoring data has shown that water-quality parameters such as dissolved oxygen, clarity, and algae concentration have gotten worse, or no better, at the vast majority of places in the past 20 years.

This summer, Chesapeake Bay experienced the worst dead zone we have ever experienced, according to the USEPA.

What is needed? In a word, my opinion is leadership.

Today we understand well the impacts of pollution, the sources of pollution, and the means by which we can control pollution. With few exceptions, the solutions are at hand and the costs are affordable.

EPA and the States must seize every opportunity to strengthen national water programs. Unfortunately, over the past few years EPA appears to be heading in the exact opposite direction. My testimony has a few more examples of that.

In the Chesapeake we have come to a relatively simple conclusion about how to save the Bay: enforce the law. A majority of pollution in the Bay is regulated by the EPA and the States under either the Clean Air or Clean Water Acts.

Both statutes require that permit limits be protective of the public health and the environment, and that each law's respective permits be attained.

Unfortunately, that is not how the permits are being written or the laws are being enforced. For example, sewage treatment plants are the second highest source of nitrogen pollution to the Bay; yet, to the best of my knowledge, not a single permit has enforceable nitrogen limits. That's over 300 permits discharging over 1.5 billion gallons of sewage a day, and no nitrogen limits.

In the Chesapeake, we have come to understand that we will need to implement a host of actions to the practical limits of technology in order to save the Bay.

EPA and the States must carry out their existing obligations in their permitting of large-animal operations, stormwater sources, new development projects, power plants and sewage treatment plants.

And Congress can help too. The pending highway bill, for example, is a golden opportunity to set aside funds for the States to control runoff pollution from the roads and highways.

In closing, our Nation has a proud history of tackling environmental challenges.

Workable regulations and consistent enforcement have formed the foundation of virtually every pollution success story of the past 30 years. This will require bold leadership from the States and the EPA.

In the Chesapeake, we are confident we can succeed; but we will need your help and the help of others.

Thank you.

Mr. OSE. Thank you, Mr. Fox.

[The prepared statement of Mr. Fox follows:]



## CHESAPEAKE BAY FOUNDATION

Environmental Protection and  
Restoration  
Environmental Education

### TESTIMONY OF J.CHARLES FOX VICE PRESIDENT, CHESAPEAKE BAY FOUNDATION

#### ON CLEAN WATER ACT ENFORCEMENT

#### BEFORE THE SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES, AND REGULATORY AFFAIRS

#### COMMITTEE ON GOVERNMENT REFORM U.S. HOUSE OF REPRESENTATIVES

OCTOBER 14, 2003

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Mr. Chairman and Members of the Subcommittee:

My name is J. Charles Fox and I serve as the Vice President for External Affairs at the Chesapeake Bay Foundation in Annapolis, Maryland. Founded in 1967, the Chesapeake Bay Foundation is the largest regional conservation and education organization in the country. Each year, we provide 40,000 students with hands-on environmental education experiences on the Bay and its tributaries. We also support extensive policy analysis and environmental restoration activities. Thank you for the invitation to appear here today to share our views on Clean Water Act enforcement and the water quality challenges confronting the Chesapeake and our nation.

Personally, I have been working on behalf of clean water for twenty years, and I am delighted to see so many of my old colleagues here today. I had the privilege of serving as the Assistant Administrator for Water at the Environmental Protection Agency (EPA) in the Clinton Administration and, most recently, as Maryland's Secretary of Natural Resources under Governor Parris Glendening.

#### **Introduction**

Our nation today confronts many challenges, but few are as relevant to every American as the quality of the water that they drink each day. Every community in the country depends on clean water for its health, economy and quality of life. The Clean Water Act has been responsible for tremendous reductions in pollution over the past thirty years. Yet, as I will describe, our nation has made surprisingly little progress in meeting the fundamental goals and requirements of the 1972 Clean Water Act. I will draw heavily on examples from the Chesapeake Bay watershed.

You asked me to discuss the EPA's enforcement of water programs. In a strict, regulatory sense, "enforcement" is the means by which the government (or citizens) assures that dischargers comply with the terms of their permits. Measures of enforcement activity typically include compliance rates, the number of civil and criminal actions, or the amount or value of penalties assessed for violations of permit requirements. While I will relay some relevant information to the Subcommittee on this subject, I suspect your other witnesses will offer greater insights into this traditional definition of "enforcement."

I would urge the Subcommittee to evaluate "enforcement" in a much broader sense. For example, have EPA and the States complied with fundamental Clean Water Act responsibilities and requirements? Are permit limitations themselves being written consistent with the Act's intent? Why has the nation fallen so far short of meeting the Clean Water Act's clear objectives?

Why are these questions so important? In the Chesapeake, if *every* permitted discharge was *fully* compliant with its permit terms at *all* times, the Chesapeake Bay would still not come close to meeting water quality standards. The Chesapeake is impaired by nitrogen and phosphorus pollution. Yet, with few exceptions, discharge permits contain no enforceable limits for these pollutants. Unfortunately, I believe the experience in our region is not unique. The simple fact is that the permit limitations are not sufficiently stringent to protect water quality, and the States and EPA are ignoring fundamental Clean Water Act responsibilities in far too many cases. In my opinion, these are the central "enforcement" issues confronting the nation's water program.

#### **Basic Requirements of the Act**

The Clean Water Act requires the EPA to issue permits for *all* point-source discharges of pollutants into the nation's waters. Each permit must include restrictions or limitations that are sufficiently stringent to meet water quality standards. The States establish water quality standards. State standards are often measured quantitatively, as the concentration of a pollutant that will protect public health and the environment (although narrative standards can supplement numeric ones). The Act allows EPA to delegate its permitting responsibilities to the States, and all but a few have accepted that charge.

The Act defines "point source," "discharge of a pollutant" and "pollutant" very broadly, with only a few narrowly defined exceptions. Virtually every man-made conveyance (pipes, ditches, tunnels, canals, etc.) and all types of pollutants (toxics, nutrients, heat, sediment, etc.) are included in the National Pollution Discharge Elimination System (NPDES) and subject to the Act's permitting requirements.

Over the past ten years, the number of NPDES permits has grown substantially, largely a result of the inclusion of stormwater pollution discharges such as municipalities and construction sites. The States and EPA find themselves in the difficult position of managing an increasingly complex system without a significant increase in resources. Over time, the States and EPA have devised a number of techniques to enhance efficiency in permit review and approval processes, most notably the widespread use of "general" permits. A general permit includes an entire class of dischargers, and has been administered in many states by avoiding the site-specific review and approval processes



of “individual” permits. However, both the States and EPA continue to face significant backlogs of permit approvals, which must be renewed or re-issued at least every five years. It is also worth noting that “general” permits must meet the same environmental standards as “individual” permits.

The 1972 Act established, for the first time, an obligation for EPA to develop minimum technology standards for major categories of pollution discharges. These minimum technology standards are incorporated into the permits issued by the States. Congress intended to create a level playing field throughout the country and to accelerate the installation of pollution control equipment. Today, EPA has a host of minimum technology standards for sewage treatment plants, major industrial facilities, and large agricultural animal operations, among others.

*Technology-based permit requirements have contributed to sizable reductions in pollution and a significant improvement in the nation’s water quality. Technology-based permit requirements have become the standard operating practice for the past thirty years, essentially defining how the States and EPA interpret and implement the Clean Water Act. However, national technology-based permit limits alone simply have not and will not allow the States to meet water quality standards.*

The Act specifically requires that, when *technology-based* limits are not sufficient to meet water quality standards, the permitting authority must impose *water quality-based* permit limits that are sufficient to meet State water quality standards. The Act further defines a number of processes, including the development of total maximum daily loads (TMDLs), to guide individual permitting decisions so that standards can be achieved. In a simple example, if the cumulative discharge from a handful of sewage treatment plants contributes to an exceedence of water quality standards, then the permitting authority must revise each plant’s individual permit to reduce pollution sufficient to meet State water quality standards. A TMDL would help guide this process by establishing overall pollution load limits and allowing the allocation of those limits among the different sources. Needless to say, the real world is much more complicated, given interstate waters, unregulated sources and, often, the lack of monitoring data to support individual permit decisions.

In the past five to ten years, the States and EPA have become increasingly interested in implementing the Act’s water quality-based permit requirements. Sparked in part by TMDL lawsuits brought by environmental plaintiffs, the States and EPA are exploring various new tools to fulfill the Act’s intent. Both the States and EPA have come to understand that watershed-wide problems demand watershed-wide solutions. This conclusion is precisely what the 1972 Clean Water Act envisioned for water quality-based permit limitations. This evolution is essential if our nation is to succeed in meeting the Act’s goals.

#### **The National Clean Water Challenge**

Scientists estimate that, in 1972, between 60 and 70 percent of the nation’s lakes, rivers and coastal waters were unsafe for fishing and swimming. According to EPA’s most recent inventory, 39 percent of rivers are unsafe for fishing and swimming, as are 45 percent of lakes, and 51 percent of estuaries. While the nation has made progress, it is

also clear that we have a long way to go to meet the public's expectation of clean water that meets standards.

Unfortunately, EPA's water quality inventory has shown little improvement over the past decade or more. Perhaps most disturbing are some indications that pollution levels are now on the rise. Worsening conditions are especially apparent in estuaries like Chesapeake Bay: between 1996 and 2000, 13 percent *more* of the nation's estuaries became too polluted to meet standards. Beach closings and beach advisories are also increasing. The Natural Resources Defense Council's annual beach report found a 19 percent increase between 2001 and 2000. A recent EPA report concluded that, in the absence of a substantial increase investment in sewage treatment, pollutant loadings from domestic sewage in 2025 will be as high as they were in 1968, when the worst levels were reported. Contaminated fish consumption advisories have been growing steadily and are now in place for 71 percent of the coastline in the contiguous states and 82 percent of estuarine square miles.

According to EPA, the leading causes of the nation's water quality impairments include agriculture and sewage treatment plants, which contribute nutrients and pathogens to local waters. Animal agricultural operations, in particular, have grown increasingly larger and more concentrated in select parts of the country. Municipal stormwater discharges and hydrologic modifications such as channelization, flow regulation, and dredging are also leading causes of impairment.

In general, our nation's growth patterns are being reflected in our water quality. Population is heavily concentrated in coastal areas and sprawling development patterns continue to exacerbate hydrologic modification problems and stormwater runoff. Fundamentally, the nation also has not managed human or animal waste in a manner that protects water quality, despite multi-billion dollar investments in sewage treatment.

#### **The Chesapeake Clean Water Challenge**

The Chesapeake Bay Program (CBP) is often described as a world-class model of ecosystem protection. This December, the CBP will celebrate its 20<sup>th</sup> anniversary. In many ways, the CBP *is* a model for the world. In other ways, it confronts the *very* same challenges of every other region in the country.

With 20 years of investment, the Chesapeake is probably the best-studied ecosystem in the world. The CBP has modeling, monitoring, and research programs that are the envy of all. CBP data is used to set quantitative environmental goals and to guide management decisions at all levels of government. The CBP also has a well-coordinated management structure, allowing scientific and policy issues to be debated at the highest levels of government. Each year, the Governors of the region join the EPA Administrator, the Mayor of the District of Columbia and a representative of state legislatures at an annual meeting of the Chesapeake Bay Executive Council.

However, like much of the nation, fundamental water quality parameters for the Chesapeake show little change or worsening conditions over the past 15 years. The Chesapeake suffers chiefly from nitrogen and phosphorus pollution, which contribute to low dissolved oxygen, decreased water clarity, and algal blooms. The Bay's extensive

monitoring network shows that the vast majority of stations have reported no change or declining conditions for dissolved oxygen, clarity, and chlorophyll concentrations since the CBP was created.

In the Chesapeake, like dozens of other areas in the country, the summertime's low dissolved oxygen events are described as a "dead zone" because living resources cannot survive in those conditions. The U.S. EPA reported that this summer the Chesapeake experienced the most expansive "dead zone" in the past 15 years. The previous most expansive event was only a few years earlier. Long-term research suggests the Chesapeake's "dead zone" has been growing steadily since the 1950s.

Agriculture is the single largest source of pollution to the Chesapeake Bay, by far. Large animal operations, in particular, generate enormous quantities of waste that are poorly managed. These operations are located in a limited number of discrete areas throughout the watershed, although their impact is felt almost everywhere. Sewage treatment plants, municipal stormwater discharges and air pollution are the other leading sources of pollution.

### **The Leadership Challenge**

Over the past decade or more, our nation's water quality generally has not improved. Most scientific indicators suggest flat or declining trends from coast to coast. Some individuals will argue that this is a success, given the nation's continued population growth and sprawling land consumption patterns. I respectfully disagree. The Clean Water Act requires that EPA and the States "*restore and maintain*" the integrity of the nation's waters. The American people deserve no less.

Fortunately, our nation benefits from the best scientific understanding of water quality issues in human history. Today, we understand well the impacts of pollution, the sources of pollution, and means by which we can control pollution. The statutory and regulatory framework is in place. With few exceptions, the solutions are at hand and the costs are affordable. What is missing? In a word, "leadership."

The EPA and the States literally must seize every opportunity to strengthen the nation's Clean Water Act programs, in everyday decisions about funding, regulations, enforcement, and individual permit limitations. EPA must advance bold initiatives targeted toward reducing key sources of pollution. Unfortunately, over the past three years, the EPA appears to be heading in the exact opposite direction of what is necessary. Consider, for example:

- *Wetlands* – EPA has proposed to redefine "isolated" wetlands and small streams out of the Act's jurisdiction, effectively removing 20 to 30 percent of the nation's wetlands and other ecologically significant waters from federal protection. This redefinition also could impact gravely the scope of the NPDES permitting program;
- *Funding* – EPA has proposed significant cuts to the State Revolving Loan Fund, the principal federal means of supporting water quality improvements by the States;

- *Stormwater Control* – EPA halted new regulations proposed to control stormwater pollution from new construction and development projects;
- *TMDLs* – EPA halted new regulations to implement one of the foundations of the Clean Water Act, and is in the process of developing new regulations that will likely weaken water quality-based permitting programs throughout the country;
- *Sewer Overflows* – EPA halted new regulations to control sanitary sewer overflows, which occur in communities throughout the country about 40,000 times each year.

Over the past three years, EPA has shown an equally poor commitment to enforcement. According to a 2003 report of the Natural Resources Defense Council:

- EPA's enforcement staff has fallen to the lowest level since EPA was created, dropping 12 percent in the past three years;
- Violators paid 64 percent less in fines during the period 2002 to 2003 than the period 2000 to 2001.
- The average civil penalty dropped from \$1.36 million to \$605,455 and polluters pay 77 percent less for required supplemental environmental projects as part of settlement agreements.

As the former National Program Manager for Water, I fully appreciate the difficulties confronting EPA and the States, particularly in times of declining governmental resources and increasing partisanship in the nation's political discourse. On any given issue, I can understand how various factors can influence outcomes that are less than ideal. Many of these influential factors may be outside the control of EPA or the State water quality agencies. Yet, in the final analysis, I firmly believe it is the responsibility of the States and EPA to implement and enforce the Clean Water Act with the passion and enthusiasm necessary to meet the Act's goals.

#### **Specific Lessons of the Chesapeake**

After years of analysis and debate among a myriad of government agencies, the Chesapeake Bay Foundation has come to a relatively simple conclusion about how to Save the Bay. Enforce the law.

The majority of pollution to the Bay is regulated by EPA and the States, either under the Clean Air or Clean Water Acts. All sewage treatment plants, large animal operations, and urban stormwater sources operate under NPDES permits issued by the States pursuant to the Clean Water Act. Power plants and automobiles, which contribute about one-third of the nitrogen loads to the Chesapeake, are regulated under the Clean Air Act. Both statutes include clear requirements that permit limits must be protective of public health and the environment, and that each law's respective standards must be attained. Unfortunately, that is not how permits are being written or the laws are being enforced in the Bay watershed. In the case of sewage treatment plant permits, Bay watershed states are ignoring their legal obligation under the Act to include adequate enforceable effluent limits that restrict discharges of total nitrogen and phosphorus. EPA must enforce this obligation.

The CBP's sophisticated computer model has defined the pollution reduction loads that will be necessary to attain water quality standards in the Chesapeake. These load reduction targets have been formally approved by each of the states. Each state, in turn, has allocated the load reduction targets to individual watersheds. In effect, the Chesapeake region has developed a TMDL to guide permitting decisions. However, neither the States nor EPA has formally recognized it as a TMDL, and permit limitations have not been written to comply with the agreed-upon load reduction targets.

The computer model also defines, in *very* precise terms, the menu of management options necessary to achieve water quality standards. These options include specific effluent limitations for sewage treatment plants and industrial discharges, as well new air pollution controls on power plants. The model also defines the needs to achieve standards for manure management, agricultural best management practices, forested buffers, wetlands restoration, and urban stormwater control, on an acre-for-acre basis. It serves as a *detailed* blueprint for action.

*The model concludes that, in order to meet water quality standards, the EPA and States will have to implement virtually all actions to the practical limit of technology.*

This dramatic conclusion is only beginning to be understood by the people of the Chesapeake region. A recent financial analysis by the Chesapeake Bay Commission concluded that the cost of achieving water quality standards was about \$9 billion more than is presently being appropriated over the next seven years. The costs associated with urban stormwater control, sewage plant upgrades, and agricultural pollution control makes up the bulk of the \$9 billion.

This funding can and must be secured through various means. Federal and state governments can and should increase financial support for water pollution control. Admittedly, this is not a particularly popular idea at a time of record federal and state deficits. However, there are a number of viable options, particularly at the federal level. For example:

- The pending *Surface Transportation Bill* could authorize a significant set-aside to reduce stormwater pollution from highways and roads. The last reauthorization included a sizable financial commitment to reduce air pollution, and there is little question that highways, roads and associated development have profound impacts on water quality;
- The new *Farm Bill* could be fully funded and directed to improve water quality. There are a number of new programs with significant new resources that could help farmers reduce pollution. The Chesapeake region has two major water quality proposals pending with the Department of Agriculture that have yet to be funded;
- Numerous *Water Infrastructure Bills* have been pending for some time, authorizing significant increases in federal support to state and local governments to improve wastewater and drinking water facilities.

In addition, the Chesapeake region needs to consider the benefits of regulation as a means of internalizing the costs of pollution. In effect, environmental regulations force those individuals and organizations that are responsible for the pollution to be responsible for

the costs of controlling it. For example, stormwater pollution requirements on new development projects will require that developers (and those who purchase or lease the properties) pay the costs of controlling pollution from their site.

### **Conclusion**

Our nation has a proud history of tackling environmental pollution challenges since the first Earth Day in 1970. The country's air and water are cleaner, pesticides are safer, and toxic wastes are managed much better. Workable regulations and consistent enforcement have formed the foundation virtually every environmental pollution success story of the past 30 years.

Today's challenges appear more daunting. Pollution sources are more diffuse, and environmental regulations are perceived by some as unnecessary or counterproductive. Yet, the goals of the Clean Water Act simply will not be met without aggressive implementation of the Act's existing requirements. This will require bold leadership from EPA and State water agencies.

In the Chesapeake, we are confident that we can succeed. We have tremendous public support throughout the entire watershed. Our scientific understanding is unmatched by any ecosystem in the world. But, we will need your help. And the help of many others.

Thank you for the opportunity to present our views.

Mr. OSE. Our final witness is Mr. Eric Schaeffer, who is the director of the Environmental Integrity Project.

Sir, welcome; you're recognized for 5 minutes.

**STATEMENT OF ERIC SCHAEFFER, DIRECTOR,  
ENVIRONMENTAL INTEGRITY PROJECT**

Mr. SCHAEFFER. Thank you, Mr. Chairman and Congressman Tierney, for the chance to testify.

I'm going to try to cover three questions quickly in wrapping up here. One is the fundamental one, do we have an acceptable level of compliance with the Clean Water Act? I think the answer has to be no.

I think a second and separate question is, how is EPA doing with the resources it's been given? Pretty well, I think. That doesn't mean good enough, but pretty well.

The most important question is, what can Congress do to help move EPA and the States toward the fishable/swimmable goals of the Clean Water Act? Because, I think these programs badly need your support.

On the first point, the Clean Water Act is routinely violated, and in very serious ways. This is not a debate over bean counting; these are violations of laws you wrote. I think you're right to be concerned; they do have public-health impacts, and they do have serious environmental impacts.

The news media has covered violations at the so-called major sources, the NPDES acronym we were using earlier. That's a fraction of the universe.

We've got 15,000 large-animal feeding operations that EPA says need Clean Water Act permits. Less than a third of those have those permits, according to EPA. This is 30 years after the Clean Water Act.

We've got violation rates that approach 70, 80 percent when it comes to stormwater requirements. I think it's a good thing that EPA's New England office focused on stormwater in its enforcement program.

When it comes to wetlands, we don't have a clue what the compliance rate is in this country with respect to wetlands requirements.

A big problem that has to be addressed is, we've heard 3,400 full-time employees for enforcement. I urge you to ask the General Accounting Office to take a look at how those resources are distributed against the size of the universe that EPA regulates. I'll give you a couple of examples.

I think you've got about 300 of those employees working on the Clean Water Act, fewer than 30 patrolling 105 million acres of wetlands. Those are pretty hopeless odds when you stack the resources up against the size and scale of the problems they're supposed to cover.

To the second point, given those limitations, I think the EPA is doing pretty well. I think the agency was right to switch its emphasis to wet-weather flows; that's clearly a problem in this area, but also in many other parts of the country.

I think some of the settlements that Mr. Suarez has announced recently are spectacular. They're environmentally very significant. These are very, very difficult cases to bring.

I can tell you, they are not generally the kinds of cases that States like to do by themselves. I don't think Governors like to take their mayors to court very often, but sometimes it has to happen; and, EPA has that role. Without it, I don't think you're going to see those kinds of cases.

So I think Mr. Suarez and Mr. Varney have done pretty well with the cards they've been dealt. I just don't think the hand they're playing is good enough, and that's I think maybe the most important part to focus on.

Six points to make there.

First, stop cutting the budget. It has been cut by successive administration requests. The Bush administration started with 270 FTEs. Congress said no. They came back and said, how about cutting 130 positions? Congress said no again. This year it's 54.

Next year is an election year, so I'm expecting to see maybe level funding, or a claimed increase with the administration at the head of the parade.

But I hope you'll continue to push back. If you've got 30 people to cover 100 million acres of wetlands, these are not programs delegated to the States. There aren't enough resources to cover the terrain.

Second, I don't think it's a good idea to improve compliance by weakening permit standards. I don't think the Bush administration needs any encouragement in that direction, so I hope you don't go down that path.

Third, I think maybe the one thing this panel can agree on is, the data systems are a mess. When I heard Mr. Suarez say phase 1, I groaned and think Chuck groaned as well. We've all been there.

When you hear phase 1 coming from a government witness, your alarm bell should go off. It means a very long, slow process. We spent a lot of money on this problem, and it's moved by inches.

There is a lot of bureaucratic resistance at the State level, it has to be said, to cooperating in this effort; I think you're going to need to push it.

We've heard a lot about State programs not being funded enough. It's true they do most of the inspections in permitting, and that's as it should be. It's true these State programs are underfunded; they need to raise their permit fees.

Some of them need to establish permit fees. They do not even have permit fees in some States.

The Clean Air Act requires a State that takes delegation of a clean-air program to have permit fees to charge the polluters what it takes to run the program. We need that in the Clean Water Act. We don't have it.

We pay to get into national parks; we should pay to pollute in this country. I think that's reasonable.

Another point, perhaps a little more mundane. Administrative penalty authority is lacking on both the Federal and the State level.



A lot of cases could be quickly resolved using administrative authority. The Justice Department doesn't have the resources to take every case to Federal court; neither do State attorneys general.

EPA's penalty authority needs to be increased for administrative actions. A lot of States cannot issue an administrative order unless the polluter agrees with the settlement. That's obviously unworkable, and that authority needs to be strengthened. I think that will take an act of Congress.

Finally, if results are ultimately what we care about and what we can agree on, you might want to take a look at the mandatory minimum penalty program that New Jersey has instituted under Republican Governor Ms. Whitman, which has dramatically reduced noncompliance in that State.

It establishes the principle that if you violate repeatedly a permit limit you will pay; and, not surprisingly, that's been absorbed and understood by the regulated community, and compliance is much better in that State. I hope you'll take a look at that.

I thank you again for giving me this opportunity.

Mr. OSE. Thank you, Mr. Schaeffer.

[The prepared statement of Mr. Schaeffer follows:]

TESTIMONY OF ERIC SCHAEFFER

Before the House Government Reform

Subcommittee on Energy Policy, Natural Resources, and Regulatory Affairs

October 14, 2003

Thank you for inviting me to testify at today's hearing regarding enforcement of the Clean Water Act. I am presently director of the Environmental Integrity Project, a nonpartisan, nonprofit organization that advocates for more effective enforcement of environmental laws. Until March of 2002, I served as director of the USEPA's Office of Regulatory Enforcement, which is responsible for enforcement of the Clean Water Act among other federal laws.

Recently, the Washington Post and other newspapers have reported results of an internal EPA study that the Clean Water Act is routinely violated by major wastewater dischargers in the U.S. (*A Pilot Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program, FINAL, February 2003*). The EPA report found that on average, about a quarter of these sources were in serious violation of the law at any one time, exceeding their permit limits for toxic pollutants by 1,000 percent or more. This is obviously an unacceptable performance that needs to be improved. But this problem has arisen, at least in part, because EPA and state agencies have been forced to make difficult strategic choices in trying to balance shrinking budgets against the vast universe of sources that contribute to water pollution in the U.S.

At the same time, several fundamental structural weaknesses keep our enforcement program from making the most effective use of the resources they do have

EPA has classified 6,652 wastewater dischargers as “major sources” requiring individual permits under the Clean Water Act. About two-thirds of these are municipal sewage treatment plants, and the remainder are industrial treatment works. Discharges from these plants are tracked fairly closely in a national database known as the Permit Compliance System, and it is this universe of sources that is the subject of EPA’s recent report and press inquiry.

Yet violations of the Clean Water Act by other sources that never appear in our national data systems may pose even more serious threats to water quality. For example:

- EPA’s report to Congress on water quality conditions identifies discharges from agricultural sources as the most important single source of pollution in our rivers and lakes nationwide. According to the Agency, about 15,500 combined animal feeding operations are required to obtain permits under the Clean Water Act under regulations that have been in effect for more than 30 years. Yet only an estimated 4,563 have done so. I say “estimated” because only about 10% of this number can be found in the national data base.
- Stormwater from more than 540,000 industrial and construction sites, along with an estimated 20,000 spills of raw sewage from aging sewer systems

overrun by heavy rainfall, are the second leading pollution source for estuaries. When I was at EPA, we estimated that at least half of the nation's construction and industrial sites did not meet even the most basic requirements of their stormwater permits. But don't look for this information in EPA's database; these violations occur outside treatment works and are only rarely reported in PCS.

- The destruction of habitat is the third most significant reason that rivers and streams are degraded, according to EPA. Wetlands destruction is authorized by the Army Corps of Engineers when permit holders promise to "mitigate" these losses e.g., by creating artificial wetlands. Neither EPA nor the Army Corps has any idea whether this program works, because there is almost no data on compliance.

Starting at least five years ago, EPA and the states shifted resources away from wastewater treatment plants, and toward these potentially more significant threats to pollution. That effort has led to some results, most notably settlements that commit cities like Atlanta, Baltimore, Baton Rouge, Cincinnati, New Orleans, Toledo, and Youngstown and (MASS) to spend billions of dollars modernizing sewer systems to prevent the overflow of raw sewage. But that success has come at a cost, as chronic and serious violations at treatment plants have been neglected for too long.

What can we do to fix this problem? Let me offer six suggestions.

**Provide Federal and State Agencies With the Resources They Need to**

**Enforce Environmental Laws:** Congress needs to confront the mismatch between the

bold promises our environmental laws make – “zero discharge,” and “fishable, swimmable waters” -- and the pitiful resources given to enforcement programs to see that those promises are kept. EPA has fewer than 300 staff in its water enforcement program; only 30 are available to patrol 100 million acres of wetlands. States issue most of the permits, but their enforcement programs are also on starvation diets. The Detroit News recently reported that Michigan employs five people to enforce Clean Water Act permits in a state with hundreds of miles of Great Lakes shoreline. Stretch the thin blue line of federal and state enforcement staff against 7,000 wastewater treatment plants, 14,000 animal feeding operations, 100,000 stormwater sources, 100 million acres of wetlands, and it’s pretty easy to understand how the programs can get overwhelmed.

Cutting the federal enforcement staff, as the Bush Administration has tried to do for three years in a row, can only make the problem worse. Trying to shift these limited resources to states will just rob peter to pay paul – state legislators desperate to balance their budgets will take the extra federal money and reduce their own contributions. If you want to document the extent of the budget shortfall, which has reached the crisis stage for enforcement of some programs, consider asking the General Accounting Office to audit federal and state environmental enforcement budgets.

**Raise Permit Fees to Provide a More Stable Funding Source:** Permit fees would provide a more stable source of funding, but some states have permit fees that are far too low, or don’t collect anything at all to cover the cost of issuing permits and monitoring for compliance. The Clean Air Act requires each state to establish a permit

fee system adequate to cover program costs, and the Clean Water Act ought to require the same.

**Close Loopholes and Make the Rules Easier to Enforce:** Permit conditions for wastewater treatment plants, along with monitoring and treatment requirements, are relatively transparent, so violations are hard to conceal. Clean Water Act rules elsewhere are far murkier, and here the Bush Administration seems to be following its usual pattern of letting industry lobbyists play hide and seek with the rules. The Clinton Administration wanted to make the large conglomerates that control most pork and poultry production in the U.S. responsible for compliance at their contract farming operations. That proposal bit the dust, along with another rule that would have established tougher and easier-to-enforce technology standards to prevent stormwater runoff. Enforcement staff may soon have to decide whether a wetland is too “isolated” or a stream’s flow too “intermittent” to warrant protection under the Clean Water Act. The Bush Administration seems to think the best way to improve compliance is to expand exemptions and make violations harder to detect.

**Expand Data Systems to Track the Most Significant Sources of Pollution:** EPA’s data system needs to track the behavior of all significant sources of water pollution regulated under the Clean Water Act, not just a comparatively small number of aging treatment plants. States should be required to regularly report data on which sources are violating stormwater and animal feedlot rules, for example, since these are the most serious threats to water quality in many parts of the country.

**Make Compliance Data Easier for the Public to Obtain and Understand:**

EPA's enforcement office recently decided to make compliance records available online, despite the protests of some state agencies that the public would misunderstand or misuse the information. It was the right decision, as the data will never improve unless it is subject to public scrutiny. Data modernization has been EPA's stated goal for many years, but the combination of inertia and entrenched bureaucracy has held progress to a snail's pace. This is another problem that may need a Congressional mandate.

**Streamline Enforcement by Expanding Administrative Penalty Authority:**

The environmental enforcement section at the Department of Justice is badly overworked. About one hundred attorneys are expected to handle cases referred by EPA under all environmental statutes, not just the Clean Water Act. U.S. attorneys can take up the slack in a few cases, but limited resources mean that some referrals languish or grow stale because there simply aren't enough attorneys to file the complaints. The problem is even worse at the state level; the environmental department of some state attorneys general consists of one or two lawyers.

While the most serious cases should always be handled by the Justice Department, some enforcement actions could be expedited with administrative actions. EPA has the authority to bring administrative cases, but only where total penalties will not exceed \$137,500. Congress should consider raising this penalty limit to at least the \$200,000 levels allowed in the Clean Air Act, and should let the Department of Justice approve cases for administrative action at even higher levels. The Safe Drinking Water

Act requires states to demonstrate that they have adequate administrative penalty authority, and the Clean Water Act should impose the same requirements.

**Congress Should Legislative Mandatory Minimum Penalties:** Violators need to get used to the idea that they will pay for repeated acts of noncompliance. New Jersey has legislated mandatory minimum penalties for Clean Water Act violations, and as a result now claims one of the lowest noncompliance rates in the nation. These minimum penalties do not have to be onerous, as long as they cost enough and are predictable enough to influence behavior. This approach may be particularly well suited to the major sources that are already well monitored under the Clean Water Act.

I want to close by thanking the Subcommittee for holding this hearing, and for taking the time to examine how well our environmental laws are enforced. The men and women responsible for assuring compliance with the Clean Water Act need your help, and I hope that Congress can find a way to better support their efforts.



### Universe of Regulated Entities and Activities Under the Clean Water Act

Concentrated Animal Feeding Operations	15,500 (4,563 permitted)
Wetlands	105.5 million acres (8% assessed)
Number of NPDES Majors	6,652
Sanitary Sewer Overflows	20,000 per year
Stormwater-Industrial	150,000 (75,000 permitted)
Stormwater-Construction	204,942 (Phase II) 186,198 (Phase I)
OPA Spills	10-14,000 reported spills in inland zones 18-20,000 (reported spills incl. coastal zones)
Facilities Subject to SPCCC	419,000

Mr. OSE. Mr. Fox, I have a specific question.

In your testimony at page 2, you discussed permitted discharges and the aggregate effect that they would have on the water quality in the Bay if they were all fully compliant. You stated that if they were all fully compliant you would still have a problem.

If I understand the system, it's the State, the 45 States, that issue the NPDES permits; and you have Maryland, Virginia and Delaware feeding into the Chesapeake.

It's also my understanding that those three States that surround the Chesapeake have an annual conference amongst their Governors. Does each State have a different permit standard?

Mr. FOX. The short answer is, yes, they do have different standards.

But in the end, the Bay itself, even being downstream, has standards that have to be met by upstream States; so, it is incumbent on either EPA or the regulated State to write a permit that is stringent enough to meet the standards of the Bay.

Mr. OSE. You're saying the watershed goes beyond the three States?

Mr. FOX. It actually goes up to Cooperstown.

And then it was determined that the fundamental issue is that the permits themselves are not being written so as to include some of the key pollutants affecting the Bay.

Mr. OSE. Well, you mentioned nitrogen.

Mr. FOX. Nitrogen is one of them.

Nitrogen is the biggest and most obvious one; and, we have a number of concentrated animal-feeding operations, large factory farms, if you will, that don't have permits, that in fact have contributed to the degradation of Chesapeake Bay.

Mr. OSE. Would this be a case where EPA would overfile?

Mr. FOX. It could happen either way. I would argue that the States initially have the responsibility to write this in their permits; and, if the States fail to do it, then the EPA, yes, has an opportunity to review all the States permits.

Mr. OSE. I'm still not quite clear on how to get through that.

Mr. FOX. Just to take it out of my backyard, I don't know the exact number, but I would bet that a majority of the States right now face impairments from nutrients, nitrogen and phosphorus. And, I would bet that the majority of the EPA technology standards, the uniform kind of blanket standards, do not really address the nutrient problem.

So, it now becomes, in my opinion, under the Clean Water Act incumbent upon EPA and the States to now write permits that will in fact deal with the nutrient impairments that affect so much of the Nation's water.

Mr. OSE. Let me jump here a little bit.

Mr. Thompson and Ms. Savage, I specifically want to ask you both, in your experience, does cooperation between enforcement and regulatory personnel improve or diminish with compliance?

Ladies first; Ms. Savage?

Ms. SAVAGE. I'll defer to him. He runs the programs; I'm the Washington mouthpiece.

Mr. THOMPSON. I guess I don't understand how divorcing the permitting people, the rulemaking people, from the enforcement people improves compliance and enforcement.

The basic understanding of that permit and that rule lies in the program area. I don't have any statistics to back this up; I've never understood how divorcing that piece of it improves things.

If you look at OECA's organization, what EPA has done is taken the enforcement folks out, and now they have two offices. They have an Office of Compliance Assurance and an Office of Regulatory Enforcement, as if those were two separate things.

In my view, they are not two separate things. There is a continuum of things that you do in an enforcement case based upon the specifics of that case, and you go along that continuum until you find the right mix based on the specifics of that case.

I would suspect that what the regulatory enforcement group has done, then, is then redefine themselves along a media line. So, I suspect we have an office there, we have an office of water, and we have an office of solid waste or hazardous waste.

So, how does it improve to separate them from the program, separate the compliance and the enforcement pieces from each other, and then have media offices within those groups? It just doesn't make common sense to me.

Mr. OSE. You're saying they should work hand in glove?

Mr. THOMPSON. They should work hand in glove.

Let me tell you something. When we write permits in Oklahoma, the best ideas for how we get environmental protection come not from our permitting staff, who tend to sit in rooms and wear green eyeshades and garters. They come from our inspection staff; they come from our enforcement staff.

So when we want to write a permit, a general permit or a specific permit, we get our folks together and we look within the Federal guidelines of what a permit must include about how to best address a specific industry.

The people that know best about that are the people that have been on the ground doing those inspections, doing that compliance assistance, doing all of those things.

The other thing is, we have a Clean Water Act, we have a Clean Air Act, we have the Resource Conservation and Recovery Act. We do not have an overall environmental act.

So the Federal statutes themselves, in my opinion, mandate those kinds of organizations.

Mr. OSE. Mr. Fox pointed out, and I'm paraphrasing, but the threshold at the Federal level doesn't address many of the things that might be necessary to get effective compliance.

I don't remember your words, but you talked about States having a separate ability to adopt statutes for their particular needs. States would retain the ability to layer on additional levels of protection of whatever nature they like, and then design their enforcement compliance programs accordingly.

Mr. THOMPSON. When we were delegated the NPDES program in Oklahoma, we were required to show the resources for statutory equivalency of the Federal program.

So our statutes and rules reflect the Federal rules.

Mr. OSE. As a base?

Mr. THOMPSON. As a base.

We have to continue to show that we have the resources to carry out the program, based on a regional review.

Mr. OSE. In order to preserve the delegation?

Mr. THOMPSON. I have a half-FTE that sits every day and pounds information into an inadequate EPA data base, the ARS data base or the PCA data base. I don't manage my program with that data base; it's impossible to manage my program with that data base.

So what I have done, and what many States have done, is create a data base that allows us to manage that program.

Now, the effort that's being made, through some work that I was a part of, is to define data standards so that those separate systems that States are effectively using to manage those programs could be tied to the national system so we can aggregate the kind of data that we need to get a national picture of compliance and enforcement and monitoring and all those kinds of things.

But, until that effort is complete, or until we've modernized the national data bases to the point where they're usable for managing programs, you're going to see the kind of data gaps that you see in the reports that showed up in the Washington Post. I have to admit that Oklahoma was one of them.

Maybe there are some reasons for that. I'm sorry, I'll quit when you tell me to; but in the national data base, if I have a municipal discharger that is pursuing funding to fix an infrastructure problem, that facility will continue to show up in that data base every time it reports.

That shows a level of recidivism even though, I have addressed that with a specific order to fix that problem.

We've got to have an engineering report, we've got to have money to fix it, we've got to have construction periods; we've got to have all those things. But, that's one reason.

Another reason is, when EPA delegated the program to Oklahoma in 1996, they kept a bunch of facilities; Oklahoma shows up as being the one that is out of compliance with this thing, but a lot of those things are attributable to the EPA.

One other thing, and I promise to—

Mr. OSE. I know we have a limit because I know what time your plane leaves.

Mr. THOMPSON. That's why I'm anxious to take my shot when I can.

The Watch List, I believe that what J.P. says about that is right. It is an excellent tool for the management of the program; it can be an excellent management tool.

But, if it goes public, the same kinds of wrap-yourself-around-the-axle issues that we've got with the NPDES report, we're going to get with the Watch List. It is not the end of the discussion; it is the beginning of the discussion. The public will take it, unfortunately, as the end of the discussion.

Mr. TIERNEY. Thank you.

Dr. Metzenbaum, what do you say about that?

Do you think the Watch List should be public? What are the benefits of it being public? What are the lost opportunities if it's not?

Dr. METZENBAUM. I think the Watch List should be public. I think there needs to be an initial wait time to clarify issues with

the States, and to explain the kinds of issues that Steve is addressing.

I think, if you don't make it public ultimately, then those data quality issues are not going to go away. You've got to fix that underlying data; and until you make the data public so other people start to use it and analyze it, there just won't be enough pressure to clean up the underlying data.

Mr. TIERNEY. Do you agree, Mr. Schaeffer?

Mr. SCHAEFFER. I agree completely.

Mr. TIERNEY. Mr. Fox.

Mr. FOX. One hundred percent.

Mr. TIERNEY. You don't agree.

Mr. SEGAL. Well, I'll just say this. I don't know enough about the way the Watch List is put together to know if it should be made public or not.

I do know from the past experience I've had with the Toxic-Release Inventory that there are so many nooks and crannies, too many failures to update it at a particular time, and too much purposeful misuse of a particular data base to characterize particular industrial sectors and other industrial sectors. By the time it's all said and done, there is so little risk information available in the TRI that, if I were running a group and wanted to focus the resources of my community advocacy group on, "the biggest pollutant in my area" and I used the TRI data to do that, I would almost certainly be pointed in the wrong direction.

So, if it's good data, release it; if it needs to be scrubbed a lot more, then don't release it yet.

Mr. TIERNEY. Better to scrub than to release?

Mr. SEGAL. That's my sage advice. If it's good data, release it.

Mr. TIERNEY. Ms. Savage, you have a good background on the history in this area; you talked to the people who originally drafted this legislation. Did you gather from them what their intention was as to how the Federal law would be funded?

Ms. SAVAGE. Certainly. In 1972, for example, the wastewater treatment construction program had a grant of over \$500 million a year.

From that point, under subsequent administrations, in the 1981 statute we went from \$5 billion down to \$2.4 billion; and now, with the SRLF, the State revolving loan fund that was created in 1987, and then subsequent to that with the drinking-water program, that \$2.4 billion has been cut in half.

So we went from \$5 billion in 1972 to less than \$1.2 billion just on wastewater treatment facilities.

It's a good thing that we've had 30 years of point discharge enforcement in activity; because if you tried to build this program on \$1.2 billion a year for sewer plants we would be in trouble.

As you well know, Congressman Tierney, for the CSOs and SSOs, the funding isn't there. You mentioned in your opening statement how the money has gone.

So, it's a real problem. We're looking at trillions of dollars to enhance our infrastructure, and the money simply isn't available to do that; we're going to have to look for Options B, C, D, E and F because it doesn't look like we're going to have the kind of funding we need to run these programs.

Mr. TIERNEY. Well, Option A is to go back to the intent of the law, which is to put the Federal Government's money where its mandates are.

I don't think there is a State or community that would resist having some assistance with compliance. I think that continues to be an extreme issue, at least in my district I know it is. They still have the same regulations to comply with; yet, the money has been dwindling, and the partnership has been fading.

Ms. SAVAGE. Our rule of thumb is that the Federal Government should foot the bill for at least 25 percent of the overall program. They certainly don't do that at this point in time.

There has been escalation in requirements by orders of magnitude from where we were in 1972, and yet the dollar support has gone down.

But I want to come back to a point that the chairman asked Steve—

Mr. TIERNEY. Are you on the same plane as Mr. Thompson?

I'm going to interrupt. You can answer the question for the chair when he revisits it again. I want to get at some other things, if I may.

Ms. SAVAGE. Sure.

Mr. TIERNEY. Mr. Schaeffer, what about the claim that the \$5,000, \$6,000 penalty limit isn't something we should be concerned about; that the decline in enforcement activities by some 45 percent because of their shift in priorities isn't something we should be concerned about?

As a former enforcement official, what are your feelings on that, and what ought we do about it?

Mr. SCHAEFFER. Well, I was part of that shift, so I'm implicated in that sense. I think it made sense to go after wet-weather issues. They'd been sitting for a while, and they're very serious.

Again, I never said or thought at the time that meant leaving the majors alone, or that giving them less attention was a good thing; it was just the choice that we had to make, or at least the one that seemed the most rational with the resources we've been given.

Again, that's why I tried to split the questions. Are we getting good compliance with the Clean Water Act? No. Has the agency had to make hard choices? Sure.

Mr. TIERNEY. In your mind, is there a connection between the level of enforcement activity and the level of compliance?

Mr. SCHAEFFER. Yes, absolutely. I just suggest we look at the New Jersey minimum-penalty program for a good example of what happens when penalties are collected routinely.

Just one last point on that.

A lot of enforcement, too much enforcement, consists of issuing a series of paper orders to the same facilities. Those don't really have a whole lot of impact. Those need attention. Some States do an excellent job; some States don't. And that's true for EPA regions as well.

It's hard to grab that \$5,000 number without knowing what the larger context is; but that's not a very significant penalty, obviously, for a large manufacturer.

Mr. TIERNEY. If we go back to the escalation issue, are we really looking at first trying to help people comply; but, if they're not, the

idea is are we escalating appropriately so that they know they can't get one fine that they can meld into their overall operating costs, and continue on ad infinitum?

Mr. SCHAEFFER. Exactly.

Mr. TIERNEY. Dr. Metzenbaum, the data information that we're talking about in the so-called PCS system, one of the issues seems to be that States are not getting the information to that system.

I listened to Mr. Thompson. It may very well be because the system can't be approached, can't be entered, or whatever; then maybe the States find it burdensome to provide that information.

Can you straighten that out for us? What's the real angle here?

Dr. METZENBAUM. I wish I could straighten it out, Mr. Tierney.

I think there is a real challenge. If you are asking anyone to feed a data system, you have to return the data to them in a more useful form; or they just don't have an incentive to focus on that system.

I think that the distinction Mr. Thompson was making is that he's running his own management system.

Eighteen States use EPA's permit compliance system. Thirty-two States have built their own systems, and then have to separately feed the EPA data system. I think part of that is that it's just too difficult to extract the data from the EPA system so that it's useful.

You could imagine a system where you would have the discharge monitoring reports for different facilities posted online so you could compare them and organize them by watershed, so that you could look at similar-size facilities, etc. That would start to be a very useful analysis.

At this moment it's hard to figure out the usefulness of this. I have hopes that the upgrade of the permit compliance system will fix this, but I have no real knowledge that's going to make me feel confident. I think that something needs to happen sooner rather than later, because December 2005 is a long time away.

Mr. TIERNEY. Mr. Thompson, with your plans—you have your own data base—would you find it more or less burdensome if the PCS system were updated and made to provide you information you found useful?

Would that be something you could shift over to; or would you resist doing it because somehow that would be in your estimation too burdensome?

Mr. THOMPSON. I think I would prefer, given the investment that they made in their individual data systems and the comfort that they have with them, to develop a system where that data can be aggregated in the national system, rather than transferring to a new national system—

Mr. TIERNEY. That technology exists somewhere, and can be done?

Mr. THOMPSON. It could be done; it can.

There is a lot of work, again, on data definitions, different things that are in effect the same action, and the ability to aggregate that data. Those systems do exist.

Mr. TIERNEY. Ms. DiBona, let me ask you, in Massachusetts, how easily can a resident find information about the water where they live, the facilities near where they live, what damage may or may

not be occurring? Is it an accessible system? Is it something they can do?

Ms. DiBONA. I think right now what residents can do is go to the EPA's Web site, where they have a watershed program, where you can click on where you live and they give the data.

The trouble is, we're not quite sure where that data is coming from, and what they're basing that information on.

Some of it's from the States, and maybe sometimes it's from watershed associations; but, as Dr. Metzenbaum pointed out, there is a lot of data out there that would be very useful if we could figure out how to put it all in one place.

If I could followup on the other question that you asked about the States' ability to use the data and report on it, Massachusetts has done a very good job of getting grant funding from EPA to startup their own electronic filing program for both permits and then monitoring reports. That all gets fed in.

They're using this as a way to make up for the employees that they've lost. The system can kick out the data that doesn't match up with the permit when the monitoring report comes in.

So, we're arguing with them about how much of that is going to become public; because that's the kind of information that is helpful to people, what's happening at the facility down the way from where they want their kids to swim.

Unfortunately, even capital funds are becoming scarce, to pay for that. They need \$600,000 in capital funds to continue the program and keep the data base moving, and they're having troubles getting that right now.

Mr. OSE. Mr. Thompson, is your system Web-based?

Mr. THOMPSON. It is.

Now, the system that I'm using most successfully is the one for air. We're in the process of developing one for water. We have individual data bases that we use to manage our water program; not the kind of collective system, aggregated system like we do.

In fact, the system that I discussed about sharing data, the systems would have to be Web-based in order to be useful.

Mr. OSE. Ms. Savage, you had something you wanted to go back to.

Ms. SAVAGE. Yes, a couple, three or four points.

Mr. THOMPSON. You're going to say what I meant to say.

Ms. SAVAGE. Yes, I've been doing it for a long time.

When Steve was talking about the difference between the divorce which took place about 10 years ago at the EPA, separating out from the programs and creating OECA, there was a reason that the agency did that; but, it was primarily for the optics of looking as if enforcement was a higher priority.

What in fact happens, however, is that you have two AA ships, two Assistant Administrators instead of one program AA. You have two similar systems, two organizational structures, two sets of staff, two sets of operating activities. You have two strategic plans.

Let me give you an example of why this is a problem for the States.

We had been negotiating with EPA and working with them on a strategic plan when Chuck was the Assistant Administrator.



That means we were working with the Office of Water to develop the strategic plan for the water program.

OECA isn't part of that discussion. So, 2 or 3 years later we can be negotiating and working through a strategic plan; OECA comes in, they weren't part of the water process, but working on their own. They didn't give us the data points that they wanted incorporated into the water program. They have a separate and totally different set of criteria.

So that is very difficult for the States to manage, because it's a duplication of effort. You get at the regional effort, so now you've got Bob Varney in Region I; now he's got two AA-ships to deal with at the regional level.

By the time you get down to the State, you have two incredibly complex sets of bureaucracies working at odds; let alone the turf, let alone the budgets, let alone reporting to the Administrator, and so on.

So it's a very complicated system; where if you have one organizational structure setting the goals and enforcing the law you have a combined effort, you know where the problems are, you solve the problems and you deal with them. That was the point I wanted to make.

I wanted to go back to a coordinated water program.

Mr. OSE. Before you leave that point, you're speaking to the coordination efforts in implementing improvements to the environment?

Ms. SAVAGE. Correct, and implementing the Clean Water Act.

I think Eric Schaeffer mentioned the fact that we were having difficulties with stormwater, and Chuck Fox mentioned about nutrient standards. He's absolutely right; nutrient standards need to be put into our water-quality standards and into our permits.

I would just mention that the CAFO animal-feeding operations were only promulgated in the end of December; so it takes a little while for that to happen. I think he's absolutely right; it needed to happen. Animal-feeding operations are a huge issue.

Two last points. One is that California also has a minimum penalty of \$3,000 per violation, and they are finding that to be very useful. The program has been so desiccated that they can't do anything—

Mr. OSE. Per violation, or per day?

Ms. SAVAGE. Per violation. It might be \$3,000 per day. Actually, I'll have to check that.

Mr. OSE. There have been a lot of bills signed in the last 10 days.

Ms. SAVAGE. That's true.

Then I wanted to come back to something that Mr. Varney said. My organization sponsors World Water Monitoring Day, which is Friday this week. We are inviting partents, teachers, and kids out to go and monitor their waterways for pH, temperature, and oxygen demand.

Also, I endorse everything he said about citizen monitoring. The reason we created World Water Monitoring Day is that we don't have enough bureaucrats in the world to do all the monitoring we need.

If we can get the people out there in the waters, walking the streams, doing it on a regular basis and recording it into a data

base—sadly, it's my data base and not an EPA data base—at least we're getting a data base. We've got to be ahead of the game.

But, I did want to take issue with the idea that the Massachusetts program or another other predecessor program is not a delegation. The program enforcement of NPDES is calculated at the Federal level, not at the State level.

I can understand your frustration. On the other hand, oftentimes the State gets lumped together.

Ms. DiBONA. We do share a delegation. It's not totally with EPA, and it's not totally with the State. They collaborate on all—

Ms. SAVAGE. The responsibility.

Mr. TIERNEY. So, they go like this (gesturing) when it becomes appropriate.

Ms. SAVAGE. Yes, exactly.

But, I believe enforcement and permitting authority is at the Federal level. That doesn't mean that the State doesn't have responsibility and they don't do some of the work; but they have the ultimate responsibility.

Mr. OSE. What I hear all seven of you talking about is the quality of information.

Ms. SAVAGE. Yes.

Mr. OSE. Item No. 1 is the quality of information that the decision is being made on.

That gets to, as Mr. Thompson said, the collection and the transmission of that data to the people who are responsible for enforcement, for compliance and the like.

And yet, along the Charles River I think the two of you were involved in a system that used volunteers—I don't know if it's Web-based or otherwise, I'm presuming it is—they used volunteers to collect information and monitor the status of the river, the outcome if you will; not the output, but the outcome of the collective efforts.

This seems like common sense to me. What am I missing?

Mr. FOX. Mr. Chairman, you're right on target.

As the person who actually helped create the assistant-administratorship for information in the former administration of the EPA, I think this is a relatively important point.

We have the technology today that allows anyone in their homes to find out anything, and frankly allows Steve's program in Oklahoma to seamlessly interact with any Federal program.

The key issue here is the data standards. Do you measure mercury in milligrams per liter, or do you measure mercury in some other unit? Do you measure your enforcement in one or another unit?

Frankly, I think it comes down to a leadership question. I'm not saying it's EPA's fault, or the States'; someone has to make the decision, what is the data?

Once that decision gets made, you watch; technology takes over, and this information becomes available to the public like that. Not quite that simple, but almost.

Mr. OSE. In addition, you attract public sector and private sectors partners who contribute.

Dr. METZENBAUM. I think data quality, data availability, analysis of the data, dissemination of it is critical.

I just want to address two issues. Mr. Thompson talked about EPA being able to take data from the States, and I think that's a fantastic model; but it does mean the EPA has to assume a much stronger role in enforcing the quality of the data than they have been assuming.

The question was raised earlier about discharge monitoring reports, and whether or not the accuracy of those is actually checked. If you're going to move to this kind of a system, you actually have to take care of the management of the information.

Then, getting it out to the public starts to engage the public in doing the analysis as well.

I just want to point out that EPA's ECHO system, environmental compliance history online, is a very powerful system. It begins to make it easier for the public to analyze the information; but it only takes a baby step.

You talked about a lot of the analysis EPA has done. Why can't we all push a button and do some of our own kinds of analyses the way EPA has done and beyond, that actually start to look at compliance history, discharge and compliance trends in different watersheds and different places, for different kinds of facilities?

I think you're completely right; information is an unbelievably powerful tool. We need to manage it and play a leadership role. We need the States and EPA to do that.

Mr. TIERNEY. Mr. Schaeffer, you were shaking your head?

Mr. SCHAEFFER. I don't know where to start. Just on a factual issue, the CAFO regulations have been around since the early 1970's.

Mr. TIERNEY. The CAFO regulations?

Mr. SCHAEFFER. I'm sorry; the large-animal feeding operations.

Mr. OSE. You come from an agricultural State; you know this issue.

Mr. SCHAEFFER. That are the source of so many water-quality problems.

The basic regs have been around for a long, long time; 30 years at this point. I just didn't want to let that pass.

I think a second point on the data issue which is a real sticking point is that it's not just the quality issue which is very important; it is the public-access issue. I do think we have deeply held views amongst some State regulators that in effect they own the data, and it's for them to shape it and let it out to the public as they see fit.

I have to say, I'm extremely uncomfortable with that. I think the data belongs to the public. In many cases it's required by law to be made public, and we ought to make it easier to get.

I think this idea that the public, if they get TRI information on toxic-release inventory, or if they get information on noncompliance are going to somehow panic and run like lemmings into the sea, is just silly.

We had a Washington Post story; so what? We're all here still alive. The flag is still flying over Oklahoma. We can survive.

We need to get this stuff out and on the street where we can debate it, and not have it be something that's controlled by, frankly, bureaucrats; whether they're at the Federal level or the State level.

Mr. TIERNEY. Do we need to change the law to make that happen; or just——

Mr. SCHAEFFER. I think we might want to look at the statute itself, because I do think this is an intractable political issue; which may mean it will be tough for you as well, but it's going to be very tough to solve at the agency level.

Mr. TIERNEY. Mr. Segal?

Mr. SEGAL. Just a quick response.

I've heard about the need for access to information for "We the People." I've heard about the need for access to information of a State-level bureaucracy speaking to a Federal-level bureaucracy.

But remember, when we talk about enforcement, we're also talking about the relationship between the government and the regulated community.

I think we could use a little bit of improvement in the quality of the information that goes to the regulated community.

By that I mean that if you're going to have a successful enforcement program, those mandates, those priorities, have to be made clear, interpretations of law have to be made clear, to the regulated community.

When they are not, and when the enforcement program becomes a moving target, a lot of mischief is done; and I frankly would say that a lot more is spent on litigation than is spent on environmental improvement, and that's too bad.

Mr. TIERNEY. I spent a good deal of my life in litigation; and I'll tell you, if they want to litigate them to avoid them, they're going to do it.

We have to make it clear, and nobody disputes this, that what they do with that is going to be on their conscience.

Mr. Schaeffer, let me ask you a question that I asked Mr. Suarez.

What do you make of the assertion that facilities subject to formal action have higher rates of recidivism than the ones that don't have formal action taken? Is that because we're focusing on problem facilities and they're more likely to keep on being bad, or is it because our fines and what we're doing aren't enough of a concern?

Mr. SCHAEFFER. My sense is maybe some of both, but you are dealing with some tough problem facilities. The truth is I really don't know, and that would be a good question to pursue with EPA.

Mr. TIERNEY. Anybody, right to left, I'd like to all give you an opportunity to give make some closing statements. Do you want to quit while you're ahead?

Mr. SCHAEFFER. I appreciate the time.

Mr. OSE. Can we get Mr. Thompson first? He has a plane to catch.

Mr. THOMPSON. I will be brief.

Mr. TIERNEY. I purposely started from the right.

Mr. THOMPSON. I think there are two things.

I think there is a need for improved data. I think there is a need for Congress to look at each component of this and really analyze who does what best.

There are things that States, because of their proximity to the issues, can do better than the Federal Government; and there are

things that the Federal Government can do that the States cannot. I'm not sure we're optimizing those resources in the best way yet.

I will also say that, as the information gets better, I believe that the solutions will be more and more driven to the local level; and to look at the responsibilities of States and of the EPA in that context will become more and more important.

Mr. TIERNEY. Thank you.

Ms. Savage.

Ms. SAVAGE. In addition to more money and flexibility—I had to get that in, guys; they were teasing me early on, don't you get tired of saying States need more money and flexibility, so I had to throw that in—one of the things that I think is absolutely essential is better monitoring.

For my part, we're doing World Water Monitoring Day, to get citizens in the water. People every year going back to their streams and waterways take responsibility, educate themselves, and get the kids to learn about water quality.

Last year we had 75,000 and we're hoping for more than a million this year.

One of the things that the chairman asked was why isn't that such a great idea, and why can't we manage programs that way? The reason is, it's great to have kids in streams, and the people, but that's not quality assurance and it's not quality control.

If our attorney friends need to go to litigation for enforcement action, they're not going to be able to use citizen science data, for the most part. So, while it's an education tool, we can make decisions, we can raise it to the government level, we can follow it up with studies.

Citizen data often cannot be used for the enforcement of legal activities. We need more enforcement; we need to put more attention in that area.

Mr. TIERNEY. Thank you.

Doctor.

Dr. METZENBAUM. I want to thank this committee for opening questions about how you can encourage increased use of information, skillful use of information, how you can leverage that information, use that as part of a tool in the regulatory system to improve environmental quality.

And I want to ask that you continue this line of inquiry. I think it's a very positive one, and that the solutions are not simple.

A lot of it is organizational inertia, but a lot of it is just very tough work that needs to be sorted out.

I hope you'll continue this line of inquiry, so that we can make real progress in a bipartisan way and encourage skillful and aggressive use of information in this area.

Mr. TIERNEY. Thank you.

Mr. Segal.

Mr. SEGAL. Congratulations to everybody; I think it was a very interesting hearing. A lot of points were made.

I think that I would be satisfied on a going-forward basis for environmental enforcement in this country if environmental enforcement administrators simply took a Hippocratic oath, which is simply that they would do no harm.

You can't swear that Hippocratic oath at this point as between the relationship between the Feds and the States; you can't swear it as to the embracing of innovative approaches, both environmental management of facilities and environmental management within agencies.

If we could just do what makes sense and not focus on turning everything into litigation, I think we would all be better served; and, that's a declaration against interest.

Mr. TIERNEY. I would say.

Ms. DiBona.

Ms. DiBONA. I'll try to be a little shorter than Mr. Thompson, but—

Mr. SEGAL. You are shorter than Mr. Thompson.

Ms. DiBONA. When we talk about having the data in good shape, it's because we want to make sure that people are doing the right thing.

In the Charles, there was regular monthly monitoring at 37 sites in a limited area of the river ongoing for many, many years.

Once a year isn't enough; once every 5 years that our agency goes out and monitors isn't enough; and even the 3 months that the students can go out and monitor the creek isn't enough.

You need to have ongoing monitoring, and volunteers aren't free. Just because we say, oh, volunteers will take the data doesn't mean we don't have to go back and do the quality assurance and quality control to make sure that the procedures are proper and to have the resources to coordinate all that, that they have the equipment that they need, the laboratory monitoring.

Mr. TIERNEY. Thank you very much.

You gentlemen still pass?

Mr. FOX. Yes.

Mr. TIERNEY. I thank all the witnesses for your testimony and time. Mr. Chairman, I thank you for coming.

[Whereupon, at 1:50 p.m., the subcommittee was adjourned.]

[Additional information submitted for the hearing record follows:]

TOM DAVIS, VIRGINIA,  
CHAIRMAN  
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BERNARD SANDERS, VERMONT,  
INDEPENDENT

October 24, 2003

**BY FACSIMILE**

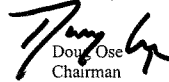
The Honorable John P. Suarez  
Assistant Administrator  
Environmental Protection Agency #2201A  
Office of Enforcement & Compliance Assurance  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Dear Mr. Suarez:

This letter follows up on the October 14, 2003 hearing of the Government Reform Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs, entitled "EPA Water Enforcement, Are We On The Right Track?" As discussed during the hearing, I am enclosing questions submitted by the minority for the hearing record.

Please send your response to the Subcommittee majority staff in B-377 Rayburn House Office Building and the minority staff in B-350A Rayburn House Office Building by November 14, 2003. If you have any questions about this request, please call Subcommittee Professional Staff Member Danielle Hallcom at 226-2067. Thank you for your attention to this request.

Sincerely,



Doug Ose  
Chairman  
Subcommittee on Energy Policy, Natural  
Resources and Regulatory Affairs

Enclosure

cc The Honorable Tom Davis  
The Honorable John Tierney

Questions for the Record  
Hearing Held on October 14, 2003  
EPA Water Enforcement: Are We On the Right Track?  
for John P. Suarez, Assistant Administrator,  
Office of Enforcement and Compliance Assurance, U.S. EPA  
from Ranking Member John F. Tierney

Subject: Pollution Levels

1. Mr. Suarez, you indicated at the October 14, 2003, hearing that you would provide information to the Subcommittee on the amounts of pollution that are allowed to be discharged under Clean Water Act programs. Please provide these amounts as well as a description of any analyses that EPA has done on these levels of discharges.

Subject: Recidivism

2. At the hearing, I asked you about the information in the NPDES Performance Analysis that showed that facilities that received a formal enforcement action from EPA actually had higher rates of recidivism than facilities without formal enforcement actions. You stated at the hearing that you would like to evaluate these findings and the reasons for this result. What steps, if any, have you taken or do you plan to take to identify the cause for these higher rates of repeat offenses? Please indicate the time frame for any future steps you plan to take on this issue.

Subject: Penalties

3. Mr. Suarez, you indicated that in response to the fact that EPA's average civil penalty for a Clean Water Act permit violation is only about \$5,000, EPA is currently evaluating whether penalties are appropriately escalated for repeat offenders. Please provide any information that is currently available on this analysis. Please indicate the time frame for any future steps you plan to take on this issue.
4. What is the average civil penalty assessed by EPA against a municipal facility for a Clean Water Act permit violation? What is the average penalty assessed against an industrial facility?
5. One of the witnesses at the hearing raised the concern that EPA only has the authority to bring administrative cases under the Clean Water Act where the total penalties do not exceed \$137,500. Are cases with penalty amounts higher than \$137,500 required to be referred to the Department of Justice, rather than being handled by EPA? If so, do you believe that enforcement of Clean Water Act violations would improve if the total penalty amount under which EPA can bring



actions were increased?

Subject: Office of the Inspector General Report, *Congressional Request on EPA Enforcement Resources and Accomplishments* (October 10, 2003) (2004-S-00001)

6. The recently released Office of the Inspector General (OIG) report on EPA's enforcement resources describes EPA's budget as a "top-down" process. What is the Office of Enforcement and Compliance Assurance (OECA)'s process for identifying its budget needs? Do you plan to request an increase in budget next year for EPA's enforcement programs?
7. Three of five of the Criminal Investigation Division (CID)'s Special Agents-in-Charge interviewed reported to the OIG that if they feel they do not have enough resources to handle a particular case, the case is referred to the Civil Enforcement Program or to state authorities. The Criminal Enforcement Program is responsible for investigating the most egregious environmental crimes. This certainly raises the concern that at least some egregious cases that ought to be pursued through CID are either not pursued at all, or are pursued at a "lower" enforcement level. Do you have any estimate of how many cases are not pursued by CID because of a lack of resources?
8. The Special Agents-in-Charge interviewed by the OIG reported that some CID agents were required to provide protective service detail for the EPA Administrator, taking time away from their investigation of environmental cases. Is protective service detail currently a function of CID and if so, will it continue to be?
9. The OIG report states that earlier this year the Office of Criminal Enforcement, Forensics, and Training (OCEFT) Executive Advisory Committee was formed to improve communication between employees and management. Who makes up the OCEFT Executive Advisory Committee? What is the role of the Executive Advisory Committee and how frequently does it meet?
10. What, if anything, is being done to address CID's need for equipment, such as modern computers, as highlighted by the Inspector General?
11. The Director of CID told the OIG that the Employee Monthly Activity Report, the system for tracking the time spent by employees on each case and by media, is "inadequate" for tracking the time spent on each case. Do you agree with this assessment? What, if anything, is being done to improve the current system of tracking the allocation of resources spent on each case?
12. The OIG report cites the OMB Program Assessment Rating Tool analysis performed on EPA's civil enforcement program in 2002 as stating concerns with the, "... lack of adequate workload analysis to support existing staffing and priorities and ... the lack of good quality data to accurately determine

compliance and monitor the effectiveness of enforcement activities.” What is your analysis of the concerns raised by OMB? How will you address these concerns?

13. The OIG report states that OECA is still working on a performance measure for ensuring that facilities under a formal enforcement action return to compliance. When do you expect such a performance measure to be identified and implemented?
14. According to Table 8.3 in the OIG report, the number of Clean Water Act enforcement actions against owners or operators of Concentrated Animal Feeding Operations has declined from 44 in FY 2000 to 4 in FY 2002. What, in your analysis, is the reason that the number of actions filed has decreased since 2000? How many enforcement actions were taken in fiscal years 2000, 2001 and 2002 for stormwater runoff violations? How many of those actions were taken against industrial facilities? How many actions were taken against municipalities?



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

NOV 24 2003

OFFICE OF CONGRESSIONAL AND  
INTERGOVERNMENTAL RELATIONS

The Honorable Doug Ose  
Chairman  
Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs  
Committee on Government Reform  
U. S. House of Representatives  
Washington, DC 20510

Dear Mr. Chairman:

Enclosed, for insertion in the hearing record, are the Environmental Protection Agency's responses to the questions that you forwarded to us following the October 14, 2003, hearing regarding the EPA's Water Enforcement Program.

Should you have any questions about the enclosed materials, please contact me or your staff may contact James McDonald in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-9942.

Sincerely,

A handwritten signature in black ink, appearing to read "Ben H. Grumbles".

Benjamin H. Grumbles  
Associate Administrator

Enclosure

**Questions and Responses for the Record  
Hearing Held on October 14, 2003  
EPA Water Enforcement: Are We On the Right Track?  
For Chairman Doug Ose,  
Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs  
Committee on Government Reform  
from John P. Suarez  
Assistant Administrator,  
U.S. EPA  
Office of Enforcement and Compliance Assistance,**

1. Mr. Suarez, you indicated at the October 14, 2003, hearing that you would provide information to the Subcommittee on the amounts of pollution that are allowed to be discharged under Clean Water Act programs. Please provide these amounts as well as a description of any analyses that EPA has done on these levels of discharges.

**Answer:** Under the Clean Water Act (CWA), facilities which discharge pollutants from any point source into waters of the U.S. are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permitting program develops technology-based and water quality-based permit limits to appropriately limit the pollutants being discharged. EPA has authorized most states to implement this permitting program. EPA is the permitting authority in Alaska, Idaho, New Hampshire, Massachusetts, New Mexico, on tribal lands and in all of the territories except the Virgin Islands. Generally, individual or general permits are developed by the permitting authorities and issued to the regulated dischargers with specific effluents limits for each pollutant or best management practices, as appropriate, to ensure protection of water quality. In addition, the permit typically requires monitoring and reporting to verify compliance with the limits specified in the permit.

There are hundreds of potentially regulated pollutants, divided into three general categories: conventional pollutants, which include total suspended solids and oil and grease; toxic pollutants; and non-conventional, such as nitrogen and phosphorous. Individual permit limits are tracked in the Permit Compliance System, along with the self-reported monitoring data provided by each facility. Given the vast differences in permitting techniques throughout the States, it has been proven difficult to ascertain a quantifiable amount of discharges permitted under Clean Water Act programs. I have asked the Office of Water to examine the amount of discharges authorized under the NPDES program. They are currently working on this analysis and expect to provide it to you within the next two weeks.

2. At the hearing, I asked you about the information in the NPDES Performance Analysis that showed that facilities that received a formal enforcement action from EPA actually had higher rates of recidivism than facilities without formal enforcement actions. You stated at the hearing that you would like to evaluate these findings and the reason for this result. What steps, if any, have you taken, or do you plan to take to identify the cause for these higher rates of repeat offenses? Please indicate the time frame for any future steps you plan to take on this issue.

for improvement is OECA's ability to remedy high rates of repeat offenses. Some of the recommendations have already been incorporated into the program and others are being implemented. The goal is to ensure timely and appropriate responses to significant noncompliers or longstanding violators, especially those where potential environmental impacts are the most significant.

3. Mr. Suarez, you indicated that in response to the fact that EPA's average civil penalty for a Clean Water Act permit violation is only about \$5,000, EPA is currently evaluating whether penalties are appropriately escalated for repeat offenders. Please provide any information that is currently available on this analysis. Please indicate the time frame for any future steps you plan to take on this issue.

**Answer:** I would like to correct the record that the average civil penalty for a Clean Water Act permit violation is not \$5,000. The correct average penalties are provide below in the answer to your fourth question.

The NPDES Majors Performance Analysis included a recommendation to provide information to OECA senior management on the quality of enforcement actions and penalties escalation. This will be accomplished through the Facility Watch List effort. The Facility Watch List will automate the process of tracking 1). informal actions in the last 2 years, and 2). the date of the last formal action and date and amount of the last penalty for facilities in significant non-compliance. This will enable us to easily identify instances where escalation of enforcement actions (issuance of informal and formal actions and penalties) is not occurring. The current timeframe for the generation of the first Facility Watch List is January 2004.

4. What is the average civil penalty assessed by EPA against a municipal facility for a Clean Water Act permit violation? What is the average penalty assessed against an industrial facility?

**Answer:** The following chart shows the average penalties for both industrial and municipal cases for FY 2000 - FY 2002:

	Industrial	Municipal
FY	Average Federal Penalty	Average Federal Penalty
2000	\$13,013	\$91,221
2001	\$111,613	\$58,145
2002	\$54,567	\$81,000

As stated in my testimony, penalty data is not the sole measure to consider in determining the success of an enforcement program. As shown in the variability in these numbers, looking at one statistic cannot tell the performance of an enforcement program. Penalties collected are one component of the enforcement and compliance assistance picture. Smart Enforcement requires that we use the most appropriate enforcement or compliance tools to address the most significant problems to achieve the best outcomes as quickly and effectively as possible. This principle is the culmination of our work and experience within the enforcement and compliance assurance

program. It crystalizes the lessons we have learned over the years into a strategy for action. Simply collecting penalties may not be the quickest or most effective way to address significant environmental problems.

5. One of the witnesses at the hearing raised the concern that EPA only has the authority to bring administrative cases under the Clean Water Act where the total penalties do not exceed \$137,500. Are cases with penalty amounts higher than \$137,500 required to be referred to the Department of Justice, rather than being handled by EPA? If so, do you believe that enforcement of Clean Water Act violations would improve if the total penalty amount under which EPA can bring actions were increased?

**Answer:** EPA is limited to a statutory cap of \$137,500 for administrative penalties (see 33 U.S.C. § 1319(g) and the *Civil Monetary Penalty Inflation Adjustment Rule*, 61 Fed. Reg. 69359 (Dec. 31, 1996)). When EPA determines that the penalties will exceed this amount, EPA must develop a judicial referral to the Department of Justice. The administrative penalty cap does not pose any undue restraint on our enforcement actions. Typically, EPA pursues civil judicial actions when the ceiling on administrative penalties may be insufficient to discourage continuing violations, for example where the cost of compliance or the economic benefit is high. EPA has not performed an analysis of the affect of increasing the administrative penalty amount on the CWA enforcement program.

6. The recently released Office of the Inspector General (OIG) report on EPA's enforcement resources describes EPA's budget as a "top-down" process. What is the Office of Enforcement and Compliance Assurance (OECA)'s process for identifying its budget needs? Do you plan to request an increase in budget next year for EPA's enforcement programs?

**Answer:** OECA's budget process is a collaborative one in which the program's senior management team engages in a rigorous analysis of resource requirements to support program activities. In addition to consideration of incremental resource needs, base resources are analyzed to determine if redirections are appropriate to support changing workloads and emerging priorities. With respect to FY 05, the Agency is currently formulating its request and will present its budget, including the request for the enforcement program, when the President's budget is released in February 2004.

7. Three of five of the Criminal Investigation Division's (CID) Special-Agents-in-Charge interviewed reported to the IG that if they feel they do not have enough resources to handle a particular case, the case is referred to the civil enforcement program or state authorities. The criminal enforcement program is responsible for investigating the most egregious environmental crimes. This certainly raises the concern that at least some egregious cases that ought to be pursued through CID are either not pursued at all, or are pursued at a "lower" enforcement level. Do you have any estimate of how many cases are not pursued by CID because of a lack of resources?

**Answer:** It should be clarified that the Special-Agents-in-Charge were talking about referring investigative *leads* to state governments or to the EPA civil enforcement program for disposition, and not *formally opened EPA criminal cases*. Formal initiated cases are always pursued, i.e., they may be closed if there is a lack of evidence that a criminal violation occurred, or they may be referred for prosecution. The following table shows the disposition of all *leads* in FY 2002:

**Disposition of Leads Received in FY 2002**

Under CID Review	Closed Prior To Referral	Referral to State/Local	Opened As Case	Refer to EPA EPA Civil	Refer to Other Federal	Total
270 (14%)	415 (21%)	702 (35%)	310 (16%)	188 (9%)	91 (5%)	1976 (100%)

8. The Special-Agents-in-Charge interviewed by the OIG reported that some CID agents were required to provide protective service detail for the EPA Administrator, taking time away from their investigation of environmental cases. Is protective service detail currently a function of CID and, if so, will it continue?

**Answer:** EPA's Office of Inspector General previously provided protection to the EPA Administrator. The October 10, 2003 OIG report, *Congressional Request on EPA Enforcement Resources and Accomplishments*, stated that "after September 11, 2001, the Office of Criminal Enforcement, Forensics and Training (OCEFT) mission became two-fold. Besides investigating environmental crimes, OCEFT would provide 100 percent response to homeland security environmental threats, such as chemical and water acts of terrorism, behind the lead of the Federal Bureau of Investigation and Secret Service. Homeland Security not only includes anti-terrorism activities, but also protecting the EPA Administrator." On September 27, 2001, the Administrator delegated the authority to provide protection to the EPA Administrator to the Assistant Administrator of OECA who further delegated the authority to the Director of OCEFT.

9. The OIG report states that earlier this year the Office of Criminal Enforcement, Forensics, and Training (OCEFT) Executive Advisory Committee was formed to improve communication between employees and management. Who makes up the OCEFT Executive Advisory Committee? What is the role of the Executive Advisory Committee and how frequently does it meet?

**Answer:** The Employee Advisory Committee (formerly called the Executive Advisory Committee) consists of a representative from each of the four divisions in OCEFT (legal counsel and resource management (LCRMD), criminal investigations (CID), training (NETI), and forensics (NEIC), and a representative for the Administrative Support Staff. The role of the Employee Advisory Committee is to obtain global issues from the rank and file employees that affect OCEFT's operations, and present these issues to management, along with any recommendations the employees may have to improve OCEFT's operation. The Employee

Advisory Committee is scheduled to meet quarterly.

**10.** What, if anything, is being done to address CID's need for equipment, such as modern computers, as highlighted by the Inspector General?

**Answer:** CIDNET, CID's secure on-line data network, became fully operational early in the fall of 2003. CID is currently sending new desk-top computers to the administrative specialists in about 15 field offices. Also, OCEFT is currently conducting an inventory of laptop computer needs for all of OCEFT, including CID. Once the inventory is concluded, OCEFT will work closely with the OECA Senior Information Resource Management Official to assess needs and request resources.

**11.** The Director of CID told the IG that the Employees Monthly Activities Report (MAR), the system for tracking the time spent by employees on each case and by media, is "inadequate" for tracking the time spent on each case. Do you agree with this assessment? What, if anything, is being done to improve the current system of tracking the allocation of resources spent on each case?

**Answer:** The former CID Director viewed the MARs system as "inadequate" because it is a manual system, with all of the limitations associated with the manual entry of data. OCEFT agrees with the assessment. CID's new Case Reporting System (CRS), which enhances the existing criminal docket (CRIMDOC), will have the capability for the automated entry, tracking and analysis of case management activities. A decision has not yet been made as to whether to implement MARs within the CRS during FY 2004.

**12.** The OIG report cites the OMB Program Assessment Rating tool analysis performed on EPA's civil enforcement program in 2002 as stating concerns with the, "... lack of adequate workload analysis to support existing staffing and priorities ... the lack of good quality data to accurately determine compliance and monitor effectiveness of enforcement activities." What is your analysis of the concerns raised by OMB? How will you address these concerns?

**Answer:** OMB's concerns regarding workload analysis mirrors a July 2001 General Accounting Office (GAO) report entitled *Human Capital: Implementing an Effective Workforce Strategy Would Help EPA to Achieve its Strategic Goals* (GAO-01-812). In its report, GAO recommends that complete and reliable workforce planning data be used to deploy regional enforcement staff to ensure greater consistency and effectiveness in enforcing environmental regulations. In response to this report, the Assistant Administrator for the Office of Enforcement and Compliance Assurance formed a Workforce Deployment Executive Steering Committee to research the issues and provide recommendations for ensuring effective deployment of enforcement and compliance resources.

At the end of October 2003, the Executive Steering Committee released its final report, which contained recommendations for improving workforce deployment for the national enforcement and compliance assurance program. Recommendations made by the Committee include:



- ▶ Maintain the workforce skills database through periodic reassessment of employees;
- ▶ Develop a methodology to guide personnel investments and dis-investments based on program needs and workloads;
- ▶ Integrate the strategic planning and workforce deployment processes through the OECA Planning Council; and
- ▶ Conduct an analysis for each national priority to determine whether resource gaps exist in headquarters or the regions that would negatively impact the ability to address the priority. Flexibly deploy resources (e.g., short term assignments, details) to address identified resources gaps.

Progress is being made on these and other recommendations, which will provide a strategic approach for addressing workforce planning.

13. The OIG report states that OECA is still working on a performance measure for ensuring that facilities under a formal enforcement action return to compliance. When do you expect such a performance measure to be identified and implemented?

**Answer:** OECA is in the process of developing a performance measure related to the monitoring and tracking of compliance with enforcement instrument milestones. This is due to be completed by the end of the third quarter of FY 04, after consultation with the Regions. We expect to implement the new measure by the end of FY 04.

14 Part I According to Table 8.3 in the OIG report, the number of Clean Water Act enforcement actions against owners or operators of Concentrated Animal Feeding Operations has declined from 44 in FY 2000 to 4 in FY 2002. What, in your analysis, is the reason that the number of actions filed has decreased since 2000?

**Answer:** We believe that the decline was due to the fact that the enforcement personnel who investigate possible violations at concentrated animal feeding operations (CAFOs), issue administrative orders, and develop judicial referrals, were heavily involved in developing the CAFO rule issued early this year, the *NPDES Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations*, 68 Fed. Reg. 7176 (Feb. 12, 2003). The rule was proposed on January 12, 2001, and EPA personnel were working on the rule from at least 2000 through the date of its issuance in February 2003. This fact is evidenced by the increase in the enforcement actions filed in FY 2003, as seen in Table 8.3 of the OIG report, which shows 15 CAFO actions filed according to preliminary reports.

14 Part II How many enforcement actions were taken in fiscal years 2000, 2001, and 2002 for storm water runoff violations? How many of these actions were taken against industrial facilities? How many were taken against municipal facilities?

**Answer:** OECA is unable to determine from its databases the number of enforcement actions taken in FY 2000, 2001 and 2002 for stormwater runoff violations. To improve upon this,

beginning with FY 2003, the Integrated Compliance Information System (ICIS) will enable us to better identify federal stormwater actions through use of an MOA priority identifier; however, this data has not yet been quality controlled with EPA regions. In addition, the modernization of the Permit Compliance System and integration with ICIS will allow EPA to track and identify federal and state actions for stormwater runoff violations at both municipal and industrial facilities.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 8 2004

OFFICE OF CONGRESSIONAL AND  
INTERGOVERNMENTAL RELATIONS

The Honorable Doug Ose  
Chairman  
Subcommittee on Energy Policy, Natural Resources  
and Regulatory Affairs  
Committee on Government Reform  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

Enclosed is a background document on EPA estimates of pollutant discharges from NPDES regulated facilities. This information supplements our response to Question 1 in EPA's November 24, 2003 response to "Questions for the Record" following the October 14, 2003, hearing on EPA's Water Enforcement Program before the Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs. This document was also transmitted to your staff via Email.

If you have any questions about the enclosed materials, please do not hesitate to contact me, or your staff may call Carolyn Levine in my office at (202) 564-1859.

Sincerely,

Charles L. Ingebreton  
Associate Administrator

Enclosure

### **EPA Estimates of Pollutant Discharges from NPDES Regulated Facilities**

The following explains the estimates of loadings that could be developed using available sources of information collected over the years as part of regulation development and EPA reports. This information is based on different models or estimation methods and covers different pollutants for different categories of discharges.

#### **Effluent Limitation Guidelines:**

- EPA's Office of Water estimates pollutant loadings to surface water, using industry-specific data. Since 1974, EPA has issued effluent guidelines for about 50 industries. The scope of the estimates is limited to those industries. The estimates are based on wastewater characteristics, treatment efficiencies, and size of the industry at the time EPA studied the industry. The estimates are not necessarily up-to-date compared to actual discharge permit allowances.
- The ELGs cover a range of pollutants from metals to sediments. For many years, the focus of the ELG program has been on controlling toxic (often called "priority") pollutant discharges. ELGs also control the discharge of "conventional" pollutants (such as suspended solids) and "nonconventional" pollutants (for example, pesticides). EPA's estimates of pollutant loadings from industrial sources are usually expressed in these three categories.
- The estimates only reflect the level of control that is associated with the technology EPA used to set national standards. Other requirements, including water-quality based limits are *not* captured in these estimates.

#### **Storm Water:**

- For the Phase II Storm Water rule promulgated on December 8, 1999, EPA developed modeled estimates of storm water pollutant loadings from municipalities and construction sites.
- Unlike other NPDES programs, the primary method of program implementation for storm water is best management practices (BMPs) rather than numeric effluent criteria.
- In developing these models EPA looked at total suspended solids (TSS) or sediment loadings controlled by BMPs, but not at other pollutants likely to be present in municipal or construction storm water.

#### **Combined Sewer Overflows (CSOs):**

- EPA's contractor, Tetra Tech, Inc., developed a model to predict loading reductions from CSOs (November 24, 2003) and EPA has collected sample data for a draft 2003 CSO/SSO Report to Congress.

- The model assumes that advanced primary treatment will be selected by CSO communities to reduce their CSO volume, and accounts for differences in treatment removal rates for the three evaluated pollutants, BOD, TSS, and floatables/trash.

**Publicly Owned Treatment Works (POTWs):**

- BOD loading reductions from POTWs were estimated in “Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment”, USEPA, June 2000, EPA-832-R-00-008; also available at [www.epa.gov/owm](http://www.epa.gov/owm). Data used was from U.S. Public Health Service municipal wastewater inventories, 1970, and USEPA Clean Water Needs Surveys, 1997.
- Baseline information from 1968 was used in this report, and loading reductions from these values must be offset by large increases in population served.
- Many POTWs operate at even higher BOD removal efficiencies than estimated; therefore, design-based effluent load reductions are understated.



**COVER  
STORY**

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## Sample Problem

*It's the 30th anniversary of the Clean Water Act and our nation is celebrating the recovery of some of its most important lakes and rivers. However, a lack of water quality monitoring means we don't have adequate data on two-thirds of the country's aquatic resources. This shortage impacts virtually every clean water decision made by U.S. EPA and other federal agencies, the states, and local governments*

ROBERTA HALEY SAVAGE

On October 18, which marks the 30th anniversary of the Clean Water Act, thousands of volunteers from around the country will take samples from local waterbodies and test them for pH, temperature, clarity, and dissolved oxygen. The National Water Monitoring Day will provide a quick snapshot of basic water quality in these locations. It will also highlight, unintentionally but ironically, a critical missing component in furthering the CWA's principal goals. After all these years, the picture of our nation's water quality that has been assembled by the federal and state governments is sadly under-developed.

To "restore and maintain the chemical, physical, and biological integrity of the nation's waters," as the act commands, means knowing their current health and thereby planning how to improve and protect it. After three decades, we can celebrate the fact that 53 percent of the rivers and streams assessed under federal and state clean water programs are rated by the U.S. Environmental Protection Agency and the states as "good" while 39 percent are "impaired." But the fact remains that these numbers only apply to the 19 percent of river and stream miles, most in highly populated and industrially developed areas, that have been assessed for their water quality. For the other 81 percent, the picture remains obscured. The image is slightly more complete for miles of estuaries and acres of lakes but, in total, according to U.S. EPA's National 2000 Water Quality Inventory, *two-thirds* of our waterbodies are unassessed, meaning that there are not enough data gathered by monitoring to fully evaluate them. Monitoring is supposed to define the problems, drive the planning and implementation, and evaluate the progress of clean water programs. This lack

of scientifically based data impacts virtually every clean water decision made by U.S. EPA and other federal agencies, the states, and local governments.

While we celebrate the impressive gains made in pollution reduction and the recovery of many of our most important waterbodies, it is important for our country to take stock and then decide where to go. Unfortunately, that's proven to be a lot tougher than it would seem.

As a nation, we have spent hundreds of billions of dollars on clean water programs, and built an impressive pollution control infrastructure to reduce municipal and industrial discharges. But we have spent only a fraction of that total on monitoring to evaluate their success or to determine what additional measures may be needed, such as programs to address non-point sources, reduce newly regulated substances, or to protect entire basins and watersheds. (In the last five years, national funding for non-point programs has been increasing, but it still has a long way to go.) The problems go beyond funding issues. As a General Accounting Office report concluded in 2000, "It would be cost-prohibitive to physically monitor all of the waters in the country, and, therefore, almost all states monitor a subset of their waters. However, most monitoring is not done in a way that allows for statistically valid assessments of water quality conditions in unmonitored waters." It will take more than money to ensure that monitoring works to achieve the goals of the act, according to the GAO. Agencies also need to improve their ability to analyze and utilize the data in their decisionmaking.

The public rightly expects us to protect their health and the environment. Citizens also expect the professionals to know about the problems America faces and how to re-

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solve them. But when asked to produce scientifically valid water quality data, we often come up short. Measuring air quality is different. The atmosphere is a comparatively simple system, and it is a relatively straightforward exercise to measure the amount of the handful of "criteria" pollutants at a number of locations to give an adequate (if not perfect) picture of air quality on a continual basis. U.S. EPA sets National Ambient Air Quality Standards for these pollutants, and evaluates the progress of states in meeting the standards. Air agencies regularly report the number of days a city or region is not in compliance. Impressively, many state environmental agency websites give real-time data gathered from a nationwide system of state air quality monitoring stations for key pollutants at numerous sites around the state. "Code Red" air quality days make the headlines, and citizens are urged to take action such as car pooling and avoiding exercise.

Water quality is significantly more difficult. There is no single body for the entire planet but instead an intricate, branching web of brooks, ponds, bogs, groundwater, beaches, springs, swamps, streams, seeps, wetlands, rivers, marshes, estuaries, lakes, bays, etc. Air quality programs are designed primarily to protect public health, but water quality programs have to not only protect public health but also preserve ecosystems and ecosystem values and functions. That means evaluating not only for the presence of certain chemicals, but also evaluating physical and biological characteristics — not a task that can be done by reading a dial.

In the years leading up to the 1972 passage of what was then called the Federal Water Pollution Control Act Amendments — an era highlighted by flaming rivers and cesspool lakes — the emphasis was on pollution abatement. Implementation of the law began with the permit system on point sources called the National Pollutant Discharge Elimination System and a huge investment by industry and by states and municipalities (with significant federal funding) on pollution con-

trol. This focus on point sources was eminently reasonable because, as one state engineer put it, "first we had to get the chunks out of the streams." The act also requires states to assess water quality to determine the effectiveness of the NPDES program in achieving overall goals. In the press to implement the permit program, this mandate received little attention, and monitoring for other pollution was honored mostly in the breach.

Following the mandates of the law, William D. Ruckelshaus, EPA's first administrator, directed the agency, and hence the states, to focus attention on permitting and enforcement actions for industrial dischargers of significant pollution and on the distribution of the \$5 billion of congressionally authorized

annual funding for the construction of municipal sewer systems. And of course Congress played a role here too by focusing national attention on the implementation of technology-based approaches (e.g., secondary treatment for municipal wastewater facilities and best available technologies for industry). The result of this emphasis, though appropriate under the circumstances, was that monitoring was placed on the back burner along with the planning for watershed improvements and protection efforts so dependent on monitoring. It is not surprising, then, that it took regulators nearly a decade to

address non-point sources as a major concern. The lack of monitoring has led to serious information and funding gaps that have plagued the nation's water programs ever since.

Funding for state environmental protection has been inconsistent and generally inadequate. Program management funds have been directed toward the basics: permitting, compliance assistance, enforcement, and a host of other management tasks. States also faced the daunting job of bringing their municipalities into compliance, spending hundreds of billions of dollars on sewage treatment and stormwater abatement. According to Derek Smithee, director of water quality for the Oklahoma Water Resources Board, "Because of lack of quality data, Oklahoma was required far too often to make water

*We have spent  
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Clean Water  
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on monitoring  
their success*

Roberta Haley Savage is the Executive Director of the Association of State and Interstate Water Pollution Control Administrators. She is also an Adjunct Professor at the LBJ School of Public Policy at the University of Texas.



## ANOTHER VIEW

## Time To Up Investment In This Key Infrastructure

Section 106 is the bedrock provision of the Clean Water Act that authorizes federal funding for state water pollution control programs. To receive "106 grants," states have to provide a prescribed match in funding. They have to maintain enforcement comparable to federal efforts. And they have to monitor the quality of their waters, including analysis, classification, annual updates, and reporting to U.S. EPA pursuant to Section 305. In 1972, it was clear to Congress that to achieve the ambitious goals of the act a solid foundation of properly collected and analyzed water quality data would be needed. Yet

the requirement for monitoring envisions a scope and intensity of water quality assessment that rarely has been accomplished, even on the nation's highest profile waterbodies.

Many states, including my own, established fairly comprehensive monitoring programs in the 1970s and early '80s. Activities included fixed station networks to support trend analysis and reporting; descriptive studies for waterbody characterization; and detailed synoptic (top to bottom) watershed surveys for establishing a factual basis for use classifications, water quality standards, and permitting. Biological and chemical information was collected routinely.

However, during those early years of the nation's Clean Water program, increasing emphasis was placed on implementing the growing set of point source controls, which were still evolving, while state and federal budgets remained flat and inflation took a heavy toll on the program's resource base. Apparently, U.S. EPA looked the other way as states dismantled their ambient water quality monitoring programs so that they could maintain primacy for the rapidly expanding National Pollutant Discharge Elimination System permitting program. To my knowledge, until very recently no

state was seriously threatened with the loss of 106 federal funds for failing to meet the comprehensive monitoring requirement, but states were threatened with the loss of primacy for programmatic failures in the NPDES program. Bringing point sources of pollution into control as soon as possible was the country's first order of business, but the tradeoff produced some unfortunate results.

Water quality monitoring programs were further weakened as agencies collected a tremendous amount of data but produced precious little information to support ongoing decisionmaking. Appropriators at both the

state and federal levels became openly skeptical and quite parsimonious in their response to funding requests for improving monitoring capacity. In reality, many seemed to sense that no good news would come from more monitoring work by agencies with an "environmental agenda." It was also a time that proceeded widespread availability of personal computers with user-friendly database and spreadsheet software so, in fairness, simply filing data was the extent of information management in those days.

As many state monitoring programs were weakened, other agencies, dischargers, academics, and citizens groups assumed monitoring roles to meet their needs and advance their own agendas. A process of Balkanization in data collection ensued that further eroded the comprehensive monitoring role states are expected to perform.

States need a substantial amount of high quality chemical, physical, and biological data for numerous stream segments for purposes of establishing the right water quality standards and use classifications during basinwide triennial review hearings. Much could be written about what it means to set the right standards, but suffice it to say that if this does not happen every other

functional water quality management element will be compromised one way or another. In Colorado, water quality standards rulemaking hearings are major events involving vigorous participation from a public with multifaceted points of view. This is the case despite the fact that standards have been thoroughly reviewed by the Colorado Water Quality Control Commission in each basin five or more times. We have not overcome the problems attendant with having a multiplicity of monitoring entities and too little money for monitoring.

While, from the outset Congress required states to develop comprehensive monitoring information to support water quality management, it vastly underestimated the investment that is required. Monitoring should be viewed as a needed component or overhead cost associated with each major water quality management program element. Indeed, monitoring is the basic informational infrastructure upon which the rest of the Clean Water program is built. In a recent survey, state water directors agreed that 17 percent of state Clean Water program budgets needs to be allocated for monitoring to fund this infrastructure; unfortunately, only half that amount, on average, is available.

Congress needs to ante up again to support state water quality monitoring programs to address this deficit, and states need to ante up as well, to provide additional matching funds. With increased funding, states should consider paying the costs for analyzing samples collected by well-trained personnel (with appropriate quality controls) who work for external monitoring entities. And U.S. EPA should require all NPDES permittees to sample and include information in their monthly discharge monitoring reports on the quality of their receiving streams, whenever feasible.

J. David Holm is Director of the Water Quality Control Division in the Colorado Department of Public Health and Environment.



J. David Holm



quality management decisions based not on science, but political expediency and public perception." The problem continues to this day. As Ken Kirk, executive director of the Association of Metropolitan Sewerage Agencies, puts it: "The quality of data upon which many regulatory decisions are currently made is poor, and the methods used from sampling to quality control are not consistent. However, the know-how exists at the local and state level to provide a much clearer picture of the health of individual waters and to determine with greater precision the source of continued impairment."

What funding level is needed to create an adequate database for national water quality assessment? Last April, U.S. EPA released an interim version of its *State Water Quality Management Resource Analysis*, which concluded that the current national gap between funding to manage state clean water programs and the amount actually needed is between \$735-960 million per year — meaning that state programs are funded at roughly one half of what administrators say they require to meet the public's expectations for clean water. The average state need for all of these programmatic responsibilities is approximately \$31 million annually, but the average grant from the federal government is only \$3.8 million — about the amount a journeyman professional basketball player makes.

From this amount and the additional funding provided through their legislatures, states are expected to fund professional and administrative personnel, modernize data systems, set and improve water quality standards, collect, process, and report water quality data and information, issue NPDES permits, enforce against violators, conduct TMDL analysis and development, implement programs for stormwater, sanitary sewer overflows, animal feeding operations, groundwater management, and watershed protection, and provide vehicles for citizen input and participation. States reported that monitoring should comprise nearly 17 percent of their water quality program budgets, and if you include the needs for data management, this percentage jumps to 30 percent. At present, however, monitoring receives only 10 percent. Some environmental activists have taken advantage of this untenable budgetary situation by initiating a plethora of legal challenges against U.S. EPA for not forcing the states to implement the law's planning, monitoring, and assessment pro-

visions. Unfortunately, this litigation has become a vortex that has sucked valuable state and federal resources away from monitoring to pay for legal defense, making the problem even worse.

As a result of the Clean Water Act, many rivers and lakes have made remarkable recoveries over the last 30 years. Along the banks of the Cuyahoga River and Lake Erie, both icons of pollution three decades ago, a resurgent Cleveland flourishes, including an attractive national park along the banks of the river. Baltimore's Inner Harbor, once a chemical sink, attracts millions of visitors a year to its shops, restaurants, aquarium, and other attractions. Thousands of athletes jump into the Hudson River in New York City each August at the beginning of the national triathlon championship, which would have been unthinkable at the time the act was passed. But with two-thirds of the nation's waterbodies going unassessed, it is nearly impossible to develop a meaningful report card on the success of the Clean Water Act, a problem exacerbated by the fact that we also don't have a baseline to show where we started. There simply was no funding in 1972 to conduct a survey of the "waters of the United States." The problem is complicated further by the fact that our ability to detect and measure pollutants has increased by several orders of magnitude and water quality standards have become more stringent at the same time, which means that progress over 30 years is an apples-and-oranges comparison. Finally, adequate numerical water quality criteria for the most prevalent pollutants — e.g., sediment, pathogens, and nutrients — are either outdated or have yet to be issued by U.S. EPA.

Monitoring is the heart and guts of the Clean Water Act. It ties the act's various programs together into a comprehensive, nationwide scheme. When Senators Edmund Muskie and Howard Baker were creating the initial drafts of Public Law 92-500 in 1972, their intent was to design a comprehensive and integrated approach to restoring and

*In the first years of the act, EPA's focus was on the permit program for industrial and municipal dischargers*

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## ANOTHER VIEW

## Data Are Insufficient, But They Can Be Better Used

In a large, varying, and relatively wet country, it is a daunting task to assess waters against human health and aquatic life criteria for more than a hundred pollutants; evaluate biological conditions; and gauge physical habitat integrity, as the Clean Water Act requires. U.S. EPA has acknowledged that, in the face of these challenges, federal and state monitoring efforts are falling short. But while some might see the glass as half empty, we see it as half full. And we see some innovative ways of filling it during a time of fiscal challenge.

Still, it is half empty. It has to be acknowledged that existing monitoring programs and data collection activities do not currently support the level of decisionmaking necessary to protect and restore waters of the United States. Without integrated water quality monitoring and assessment programs, state and national water quality managers cannot make effective decisions, show trends in water quality, or evaluate how well management actions are achieving the goals of the Clean Water Act.

Monitoring program gaps include lack of sufficient geographic coverage to characterize waters of each state and the nation, lack of focus on all types of water resources, and difficulty in coordinating among multiple federal, state, academic, and volunteer organizations that collect monitoring data. Our challenge is to develop and enhance state monitoring programs that support timely management decisions, within the context of declining national and state budgets. We can meet this challenge through strategic redesign and implementation of monitoring programs, increased use of technology, and effective coordination with the efforts of others.

While more federal money would be welcome, and federal grants to support state water programs have increased as in-house resources have declined, in the cur-

rent fiscal situation we need to look in other directions for solutions. Rather than a silver bullet, these include the strategic re-orientation of state monitoring programs encouraged by U.S. EPA through guidance and regulation, the use of new and improved technology to collect and manage data, and the more effective use of data collected by properly trained volunteers, dischargers, and others.



Margarete Heber

U.S. EPA works with states through a variety of forums to make monitoring more efficient and effective. Agency guidance and policy promote integration of water quality monitoring designs with relevant management decisions. The new monitoring framework, evolving from ongoing EPA, state, and other stakeholder collaboration, involves a process that links broad-scale, probability-based monitoring with site-specific, targeted monitoring where problems are indicated.

There is tremendous potential for new technology to support monitoring. Advances in environmental sampling technology, such as remote sensing and in-situ monitors, can significantly reduce the costs of field data collection. Advances in data management and analysis increase the amount of data from various sources that are available to support decisionmaking. Electronic reporting improves the efficiency of data management and the accessibility of water quality characterizations.

EPA's new Watershed Assessment, Tracking, and Environmental Results (WATERS) capability integrates existing water quality databases, containing information submitted by states and other organizations, by using the National Hydrography Dataset as the geographic framework. WATERS presents the data as a map with all the "areas of interest" noted. Databases linked through WATERS to date include Water Quality Standards

adopted to protect specific waters, chemical and biological monitoring data, assessment results describing WQS attainment status, impaired waters, beach closures, and development of Total Maximum Daily Load limits.

Improving the comparability of data is a multi-agency effort aimed at developing consistent data standards for documenting data quality and for assessing the comparability of different analytical methods. The Environmental Council of States' environmental data standards committee recently proposed water quality data elements for chemical and microbiological analytes which define the information required to adequately document the quality of monitoring data, and will serve as the template for EPA's Central Data Exchange for monitoring data.

EPA hopes to expand its assistance to help states establish state monitoring councils. State monitoring councils can bring together all stakeholders conducting monitoring within the state. These councils facilitate planning and coordinating monitoring activities and sharing water quality data. Potential partners in each state include state and federal agencies, academia, volunteer monitoring groups, watershed groups, and local governments.

At the local level, watershed monitoring consortiums consisting of public/private partnerships may plan, fund, and implement monitoring activities at the watershed level. Local organizations with overlapping monitoring responsibilities and needs can pool resources and experience and draw on the local community—including industry, public utilities, citizen monitoring groups, and government—to generate monitoring data that supports local and state decisionmaking needs.

So the glass is half full, and we're doing our best to fill it. And we're monitoring our progress.

Margarete Heber is Chief of the Monitoring Branch of the U.S. Environmental Protection Agency.

maintaining water quality. They started by declaring national mandates for "zero discharge by 1985" and "fishable and swimmable waters by 1983." To achieve these overarching aims, especially the latter, they created a program that would use monitoring to drive state water quality assessment, analysis, standards setting, and planning, then permitting and effluent limitation guidelines for point source dischargers, grants for the construction of wastewater treatment facilities, and reporting, with federal oversight to assure successful implementation. And, when Representatives John Blatnik and William Harsha, the House floor leaders, were crafting their bill, they focused on a similar stepwise approach to pollution cleanup that included the traditional plan-design-implement strategies that had been successful in many of the states.

Monitoring is the key to this system. Monitoring should drive the planning process and provide the necessary data to evaluate the results of the programs that were created, and then provide feedback to show what remained to be done. As Sally Knowles, assistant chief of the Bureau of Water in the South Carolina Department of Health and Environmental Control, puts it, "Monitoring is the necessary vehicle for a cohesive, interrelated approach to water pollution control. Standing at the confluence, it provides the opportunity for integration of sometimes apparently non-related tasks or programs into a stepwise, interrelated approach to the protection of water quality in the state." But monitoring can only work in this way if the scientific and administrative means exist to analyze the data and use the analyses to inform agency decisionmaking. Collected data is of little value unless it is incorporated into a meaningful format that readily translates sampling results into decisionmaking tools. A former U.S. EPA administrator once opined that "I have rooms full of data, but no one can tell me if the water is getting clean."

Virtually all of the requirements of the act under the "restore and maintain" mandate are dependent on water quality analysis—and monitoring to support it. States are required to survey the waters in their boundaries and assign "designated uses," such as fisheries, drinking water sources, recreation uses, bodily contact, or shipping and other commercial uses. Section 303(c) then requires the reevaluation every few years of

water quality standards to meet the designated uses. Where monitoring data and technology-based effluent limitations indicate that waters do not meet the water quality standards necessary to achieve their designated uses, Section 303(d) calls for states to calculate the Total Maximum Daily Load of pollutants that create the impairment, then divide the loading of these pollutants among the various sources in the watershed. These Load Allocations are distributed among non-point sources through Section 319(a) and point sources through NPDES. Reaching out beyond specific waterbodies, Section 208 requires plans to be developed for water quality improvement for metropolitan areas and Section 209 for river basins or watersheds. And Section 303(e) requires continuous planning, which means that states must use monitoring to reassess waterbodies on a fixed schedule to chart their progress and feed back into the planning and implementation programs. Finally, Section 305(b) requires states to submit biennial reports to U.S. EPA on the status of their waters under these programs. The agency then collates the states' data and submits the National Water Quality Inventory to the Congress. All this implies monitoring at every stage of the process.

These interlocked programs, so important to the senators' and representatives' concept, were never fully implemented because of the lack of funding and personnel to do statewide water quality analysis and planning. When placed in a position to choose, the states' needs for site-specific water quality data and information for their day-to-day decisionmaking on permitting and to address spills and other emergencies has had a higher priority than producing a complete statewide assessment.

At the same time, there has been an ever-growing list of new requirements on the water quality programs and a demand for a growing level of sophisticated problem solving. These include: the expansion of state water quality standards from only a few parameters (such as suspended solids or biological oxygen demand) to over a hundred; the need to address toxic chemicals; the requirements for advanced levels of waste

*Congress  
played a role,  
too, by  
providing  
funding for  
states and  
mandating  
technologies*

treatment to meet water quality standards; the control of wet weather pollution, including non-point sources, stormwater, combined sewer overflows, and sanitary sewer overflows; groundwater/source water protection; animal feeding operations and nutrient management; and coastal and wetlands protection and pollution prevention.

*Monitoring was supposed to be the heart and guts of the act. Senators Muskie and Baker wanted it to drive the program*

The nation's mistake was not in the funding of point-source controls but in the non-funding of the non-point and monitoring programs.

Five years ago, in her evaluation of the Clean Water Act on its 25th anniversary for this magazine, Fran Dubrowski found lack of monitoring to be one of the key impediments to achieving the law's goals. However, she noted, "the Clean Water Act gives EPA all the authority it needs to require states to adopt comprehensive monitoring networks for all navigable waters. What is missing is the agency's willingness to require states to ante up. Until EPA begins to place an appropriate value on adequate monitoring, our water program cannot move forward as Congress intended and the public demands."

Monitoring begins with the Clean Water Act's basic parameters — physical, chemical, and biological integrity. Physical qualities are characteristics such as temperature and clarity. Chemical analysis involves looking for the presence and amount of specific constituents and pollutants such as dissolved oxygen and nitrates, toxic metals, and harmful organic compounds. Bio-monitoring generally consists of macroinvertebrate sampling and fishery sampling and provides information on species diversity and abundance, which is the determining factor in whether or not an aquatic life use is attained. Monitoring can range from fixed stations to "grab samples." It can range from meters reporting pH in real time to technicians scraping off rocks to test for the presence of tiny invertebrates. Costs per sample can range from a few pennies to more than a thousand dollars.

Monitoring data are collected by state environmental, agricultural, conservation,

health, and forestry agencies. Data are also collected by federal agencies, including the Environmental Protection Agency; the U.S. Geological Survey; the Army Corps of Engineers; the Departments of Agriculture, Energy, Interior, and Transportation; and the National Oceanic and Atmospheric Administration. Local government agencies, point-source dischargers, watershed councils, and citizen volunteer monitors also provide important monitoring data.

In the 1960s-80s, state monitoring efforts comprised fixed station networks used for trend monitoring and 305(b) reporting. There were also descriptive studies for waterbody characterization, surveys to establish the factual basis for use classifications, and analyses to formulate water quality standards.

In the late 1980s and well into the 1990s, an acute crisis in state budgets translated into a significant amount of personnel loss by attrition, budgetary reallocations away from monitoring programs, a resultant breakdown of comprehensive monitoring networks, and the fragmentation of efforts attendant to the "crisis de jour." In testimony before the House of Representatives, Peter F. Guerrero, director of the General Accounting Office's environmental division, said: "States tend to focus their monitoring on waters with suspected pollution problems in order to direct scarce resources to areas that could pose the greatest risk."

Since the late 1990s, there has been a revival of the watershed management approach, which included the establishment of basin-wide monitoring systems and the orderly sequencing of associated monitoring, standards development, TMDL development, and permit issuance, attempting to at last put the Clean Water Act's water quality goals into place. Preliminary results from a survey completed in June by the Association of State and Interstate Water Pollution Control Administrators (funded in part by U.S. EPA) found that of 45 reporting states, half have all of the 10 elements of an adequate state monitoring program in place, as defined by the agency's draft monitoring guidance. The other half reported some components in place or under development. The ASIWPCA survey also shows that there is a wide range of state definitions of "monitored and assessed." One state may have a broad definition and therefore may indicate that all waterbodies have been monitored, while another state giving the same amount of effort

may nonetheless have a narrow definition and reflect only a small percentage. According to the GAO, "Variations are found in (1) the standards states use to assess water quality, (2) the way that states select their monitoring sites, (3) the kinds of monitoring tests that states perform and how they interpret the results, and (4) the methods that states use to determine the causes and sources of pollution." Such reporting can also be affected by the size of the state, by the number of waterbodies within the state, and total water resources. Some states found it difficult to reconcile the requirements of various sections of the law (e.g., 305(b) and 303(d) as a function of defining "monitoring and assessed"). The goals of these requirements are significantly different and are often inconsistently implemented from one U.S. EPA region to the next.

The survey also found that most states have moved or are moving away from fixed-site stations. States are now using more special studies, probability-based monitoring, and other targeted approaches. Bio-monitoring and bio-assessment (in-stream analysis to evaluate the indigenous aquatic habitat) has also become a focus of many state monitoring strategies.

The states reported to GAO that aside from a lack of adequate funding, the chief barriers to program implementation are hiring freezes and personnel caps. The most common barriers to developing comprehensive, ongoing monitoring programs at the state level are the lack of appropriately trained personnel for data collection and management and inadequate laboratory facilities and equipment.

Here, it must be noted that ASIWPCA found that volunteer monitoring, virtually non-existent a decade ago, is becoming a major contributor to state monitoring programs. While volunteer programs cannot substitute for effective governmental monitoring, they can help to increase the amount of monitoring data available for environmental decisionmaking. However, there is broad variation in what states provide in terms of support and technical resources for citizen monitoring. Also, there are varying degrees of quality control for citizen data collection.

The survey results also indicate that more attention must be paid to preventing the unimpaired or threatened waters from becoming polluted. This will require more monitoring of the health of a watershed as well as its water quality.

**T**he lack of monitoring means that it is not really possible to issue a report card on the Clean Water Act after 30 years. Or maybe it means a grade of "incomplete" for federal and state programs. Comments from some of the survey participants help fill in some detail.

Many states cite large gains. According to Oklahoma's Derek Smith, "We are now collecting data in a more comprehensive fashion. Using the states' Beneficial Use Monitoring Program, Oklahoma can interpret the data more consistently, and by using our Use Support Assessment Protocols, we are now making decisions with facts and data."

But even so, "needs improvement" is the grade for most programs. "We can no longer afford to prolong needed improvements in data quality," says the Association of Metropolitan Sewerage Agency's Ken Kirk.

"Regulators must have the highest quality information to justify the imposition of billion-dollar upgrades to treatment plants and collection systems." In recent hearings on Capitol Hill, several senators declared that sound investment in environmental protection requires an accurate picture of the problems to be addressed. "We should know with much greater certainty what environmental benefits our communities will enjoy with their investment so that they are spending their money in ways that will guarantee water quality improvements," said Senator Joe Lieberman (D-Connecticut). Monitoring efforts at the state level, however, are hamstrung by lack of resources, and the potential for increased funding is grim. The availability of resources to secure qualified personnel is equally grim. Without a greater commitment by policymakers and the public, key water quality management decisions will continue to be made based on inadequate data.

Some regulators see monitoring improvements as not only critical to address existing programs such as industrial effluent and wastewater but also to highlight new problems. "Point source discharge monitoring indicates that things are well under control," says Buddy Morgan, a municipal wastewater treatment facilities manager in Alabama.

*Monitoring  
would  
underlie state  
water quality  
assessment,  
standard  
setting,  
solutions, and  
evaluation*

"The remaining problems are primarily from non-point source contributions from agricultural and other dischargers of diffuse pollution. There is little non-point source monitoring to accurately reflect the magnitude of the problem." But Glen Keppy, an Iowa farmer and past president of the National Pork Producers Council, feels differently: "Farmers, as the ultimate stewards of the land, are the ones who care for the earth on a daily basis. The industrial and municipal dischargers have had more than three decades to address their point source problems. The municipal sewer agencies have received hundreds of billions of dollars in congressionally authorized funds supplemented by local ratepayers to help build, maintain, and upgrade and monitor their pollution control systems."

With that said, there are opportunities to enhance the monitoring program.

*The mistake was not in funding point-source controls but in the non-funding of non-point and monitoring*

These opportunities include: grassroots support to change the political winds and reverse the downward funding trend; coordination of monitoring efforts by all levels of government; integration of multiple objectives with single monitoring efforts; emphasis on the importance of monitoring at the local, state, and federal levels; incorporation of state-of-the-art approaches to link data systems and improve reporting; establishment of monitoring priorities with significant public involvement, which could include the creation of statewide monitoring councils or the creation of public/private monitoring partnerships;

the creation of a budgetary item for monitoring and assessment programs; establishment of volunteer monitoring corps to increase the total number of waters monitored; elimination of duplicative monitoring between and among the various state and federal agencies; increased use of part-time monitoring from universities or trade schools and the help and support of the public.

Though not a panacea, these and other innovations and enhancements could be the stopgap needed to elevate the stature of the water monitoring program and raise its priority so as to be recognized as the scientific foundation of water programs.

For its part, U.S. EPA is promising improvements. Bob Wayland, the director of

the Office of Wetlands, Oceans, and Watersheds, says, "There is no higher priority for our national water program than strengthening our monitoring program. This means that state and federal agencies need to work together to increase the number of monitored waters, monitor waters for all designated uses, manage our monitoring programs to anticipate emerging needs (e.g., TMDLs, permitting, water quality standards, etc.), use statistical modeling techniques to fill in the gaps between monitoring stations, and become more efficient in the use of available monitoring resources." The agency's assistant administrator for water, Tracy Mehan, says emphatically, "Monitoring is one of my highest priorities for 2004." Indeed, there is already speculation that the agency has proposed an increase in funding for monitoring to the Office of Management and Budget for 2004.

This signal from U.S. EPA that the priority on monitoring will be elevated is timely and most welcome, especially in light of the increasing sophistication needed to report on water quality. To give an idea of what states actually need, here is a list from J. David Holm, the director of Colorado's Water Quality Control Division, "The ideal monitoring program would include: sufficient sampling intensity; sufficient sampling frequency; appropriate chemical analyses; ambient toxicity monitoring; bio-assessment; habitat assessment; watershed assessment; compliance monitoring; emergency/spill monitoring; project feasibility monitoring and project effectiveness monitoring. The ideal program would also include systematic statewide assessment and trends analysis."

Despite the term "ideal" — and the technical language — that list is an accurate and reasonable description of the monitoring elements necessary to protect public health and the environment, to achieve fishable and swimmable waters, to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Hopefully, the report card on the Clean Water Act at the next five-year anniversary will show the level of excellence the American people deserve. The question is whether our nation will be willing to dedicate the fiscal and professional resources necessary to accomplish that goal. ♦

**Enforcement Trends at the  
Massachusetts Department of Environmental Protection  
1997-2000**

*by:*  
**Environmental League of Massachusetts**

**Executive Summary**

Establishing compliance with environmental laws is a matter of protecting our health as well as our natural resources. When violations that threaten public health and environmental resources are found, penalties should be levied that dissuade others from taking the same route, to ensure that crime does not pay.

Is this the case in Massachusetts? Citizens in Chelsea and the in the Merrimack Valley question the effectiveness of our current system. Faced with inaction on the part of the Department of Environmental Protection to make industry comply with existing laws to stop ongoing pollution in their neighborhoods, they took matters into their own hands, with lawsuits and rallies.

*The Environmental League of Massachusetts developed a status report on compliance and enforcement in Massachusetts after careful of review and analysis of available DEP data, interviews with staff, and discussions with professionals who interact regularly with DEP on enforcement issues. Some of our findings include:*

- While the number of facilities holding DEP permits has increased by more than 20,000 over the past three years, the number of inspections has remained constant.
- A given Massachusetts permit-holding facility can expect a compliance inspection only once every 17 years.
- DEP does not know how many companies are complying with existing laws
- DEP has no central system for tracking follow-up inspections after violations have occurred.
- Once found and penalized, few violators end up paying the full value of their penalties, instead receiving suspensions that may allow them to make money by breaking the law.

***Our conclusions:***

We should have the right to know who is polluting our air, land, and water. We ask government to monitor public health threats and report the results of restaurant, hospital, and drinking water treatment inspections – the same should be true of facilities located literally in citizens' back yards. The Environmental League has introduced a bill to the legislature (S.1144, *An Act to Promote Efficiency and Fairness in Environmental Law Enforcement*) that would require more reporting to the public. Senator Marian Walsh and Representative Cory Atkins sponsored the legislation, which is currently in the Natural Resources Committee.

We need stronger enforcement of existing environmental laws to protect the health and well-being of our families and our communities. While most companies want to do the right thing, we

need to protect the public from those who would pollute our communities. Right now, Massachusetts is badly in need of better enforcement to stop companies that escape accountability for their actions and continue to poison our water, land, and air. We need to make sure government does its job by exposing repeat polluters in the Commonwealth and holding them responsible.



**Who Is Guarding Our Waters?  
A Report on the Wisconsin DNR's  
Enforcement of Water Pollution Laws**

*by:*

Midwest Environmental Advocates

**Executive Summary**

Environmental laws are only effective if they are enforced. Citizens and the government play a vital role in ensuring that our natural resources are protected by bringing environmental enforcement actions against polluters. One of the primary purposes of enforcement is to deter future violations and ensure that our natural resources receive the protections the legislature intended them to have. If facilities can continually violate their permits and pollute Wisconsin's resources with no serious reaction by state regulatory agencies, there is no real incentive for facilities to correct their pollution problems. If facilities are not required to pay penalties to the state to remedy the extra pollution they have added to Wisconsin's natural resources, it makes better business sense to avoid or delay the costs of upgrading systems to reduce pollution.

For this report, Midwest Environmental Advocates (MEA) analyzed a decade of data on the Department of Natural Resources' (DNR's) enforcement of significant permit violations by industrial and municipal sources of water pollution. Never before has the public seen such a comprehensive analysis of water law enforcement in Wisconsin. This information is vital for the public to know how the DNR is doing in its role as trustee of the waters of our state.

This report brings together information from a variety of databases maintained by the DNR and the Environmental Protection Agency (EPA). It assesses how well industrial and municipal sources of water pollution are complying with their permits and how comprehensively the DNR is tracking and enforcing permit violations.

MEA's analysis shows that there is a serious problem with the DNR's enforcement of permit violations by industrial and municipal polluters.

- From 1990 to 1998, between 28% and 46% of major industrial facilities were in Significant Non-Compliance with their Wisconsin Pollutant Discharge Elimination System (WPDES) permits. During the same time period, between 31% and 55% of major municipal facilities were in Significant Non-Compliance with their WPDES permits.
- From 1990 to 1998, on average, the DNR sent Notices of Violation to only 10% of all municipal and industrial facilities in Significant Non-Compliance with their WPDES permits. During that same time period, the DNR only referred to the Department of Justice for prosecution 2.5% of all industrial and municipal facilities that were in Significant Non-Compliance with their WPDES permits.
- Since 1995, the DNR has consistently failed to meet its goal to inspect each major industrial facility with a WPDES permit once per year. The DNR's inspection record went from apparently perfect in the years 1990 through 1994 to failing to inspect up to 53% of all major industrial facilities in 1999. By comparison, the DNR diligently

inspected major municipal facilities until 1998 when it failed to inspect 19% of all major municipal facilities.

With so few facilities actually referred to the Department of Justice for prosecution, the state failed to deter future violations and lost a significant amount of revenue that polluters should have paid to the state in the form of penalties or forfeitures. By our calculations, in 1998 alone, due to the absence of enforcement actions, the state failed to collect between 14 and 284 million dollars in potential penalties from industrial and municipal sources of water pollution.

STATEMENT OF JOEL A. MINTZ, PROFESSOR OF LAW, NOVA SOUTHEASTERN UNIVERSITY LAW CENTER AND MEMBER SCHOLAR, CENTER FOR PROFESSIONAL REGULATION TO THE U.S. HOUSE OF REPRESENTATIVES, GOVERNMENT REFORM COMMITTEE, SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES AND REGULATORY AFFAIRS

Mr. Chairman and members of the sub-committee, thank you for the opportunity to submit a statement at this hearing on behalf of the Center for Progressive Regulation. The Center is an independent grouping of university-affiliated scholars who specialize in the legal, scientific and economic issues that surround health, safety and environmental regulation. For further information regarding our organization and its goals and perspectives, please visit our web site at <[www.progressiveregulation.org](http://www.progressiveregulation.org)>.

The topic of this hearing, U.S. Environmental Protection Agency (EPA) enforcement of the Clean Water Act, has been one of my own principal professional and academic interests for more than 28 years. From August, 1975 to the early spring of 1981, I was an attorney and chief attorney with the EPA's Midwest Regional and Headquarters offices in Chicago and Washington, D.C. I have also studied and written extensively regarding the EPA's enforcement programs since becoming a law professor in 1982. My published works on this topic include Enforcement At the EPA: High Stakes and Hard Choices<sup>1</sup> (a book length study of the nature and historical evolution of EPA's enforcement programs) as well as numerous articles in law reviews and journals.<sup>2</sup>

Regrettably, the news that I have to share with you in the balance of this statement is disappointing. From the available evidence, it appears that the effectiveness of EPA's water enforcement efforts has declined notably over the past few years. EPA is enforcing Clean Water Air standards less well and with fewer resources than has been true in the past. Moreover, at least at this writing the current administration's express preferences and

leadership style provide scant basis for optimism as to the future efficacy of EPA's Clean Water Act enforcement program.

In order to put EPA's current water enforcement decline into perspective, I think it is important that you comprehend the elements needed for a deterrence-based environmental enforcement program to succeed. There are, I submit, at least five such necessary elements, the absence of even one of which may seriously weaken, or completely negate, the effectiveness of such a program. These elements include:

1. Consistently strong support by the very top leaders of the environmental agency for an effective, deterrent enforcement effort.
2. Communication of that top management support to all agency managers and line staff with enforcement responsibilities; and acceptance of a pro-enforcement stance by EPA officials at all levels.
3. An amply sized, well-trained, experienced, and intellectually engaged professional enforcement staff (from inspectors to scientists and engineers to attorneys).
4. An effective strategy for maximizing the effectiveness of the agency's enforcement resources, and
5. A steady level of enforcement program activities (including facility inspections conducted, administrative orders issued, judicial actions filed, penalties imposed, and similar measures of enforcement activity).

Unfortunately, as this statement will describe, the present administration's enforcement efforts - with respect to the Clean Water Act and other environmental legislation - appear to lack all of these elements of enforcement success.

According to one recent analysis, the size of EPA's enforcement and inspection staff has contracted more than 12% since the beginning of 2001.<sup>3</sup> Violators paid considerably less in civil fines for breaking environmental laws during the current administration than they did during an equivalent portion of the Clinton administration.<sup>4</sup> The average civil penalty paid by polluters has dropped from \$1.36 million in the Clinton years to \$605,455 during the present administration,<sup>5</sup> and polluters now pay 77 percent less for supplemental environmental projects (SEP's) than they did during the 1990's.<sup>6</sup>

Beyond this – and certainly not coincidentally – noncompliance with the requirements of Clean Water Act NPDES discharge permits by major facilities has remained at distressingly high levels. According to the EPA's own (recently compiled) figures, approximately 25 percent of major facilities that discharge pollutants to U.S. waters are now in "significant noncompliance" with their permits.<sup>7</sup> Moreover, many of these permit violations have very serious harmful environmental impacts. Half of the permit exceedances for toxic discharges were discharges at more than twice the levels of pollutant release permitted; and more than 13% of the toxic discharge violations were actually more than 1,000% in excess of permitted levels. In addition, more than 1/3 of the permit exceedances involving conventional pollutants (i.e. BOD wastes, suspended solids, etc.) were discharges of at least twice the pollutant discharge levels allowed by law.<sup>8</sup>

Equally troubling is information that I gleaned during 20 in-person research interviews that I conducted last spring, with present and former enforcement officials from EPA and the U.S. Department of Justice (DOJ), to update my 1995 study of EPA enforcement. Since those interviews were only the first among a number of rounds of interviews that I plan to conduct, they may serve as the basis for a preliminary set of

conclusions only. Nonetheless, I am reasonably confident that most if not all of the "working hypotheses" of my initial research will be validated after this research is completed. Among other things, my discussions with EPA and DOJ enforcement staffs indicated that, by and large, the Agency's professional enforcement staff has little confidence that EPA's top managers are genuinely committed to a deterrent enforcement effort.

In a number of EPA offices, the Agency's Senior Executive Service (SES) officials are not routinely consulted by the political appointees whom they report to with respect to questions of enforcement policy. This situation appears to have contributed to a widespread decline in the morale of the Agency's permanent enforcement staff. It has also hastened the retirement of a number of seasoned EPA managers and supervisors, individuals whose collective "know how" and "institutional memory" are valuable assets to the EPA and its enforcement efforts.

Beyond this, EPA's enforcement of the Clean Water Act (as well as other environmental statutes) has been hampered by other factors. In contrast to previous administrations, EPA's current top management has pursued relatively few targeted enforcement initiatives. Such initiatives focus federal enforcement efforts on recalcitrant companies, particular industries, or heavily polluted geographic areas, where such a concentration and coordination of enforcement resources is likely to have an especially significant impact. Since their introduction by EPA in the late 1980's, they have proven to be an unusually efficient use of governmental enforcement resources. EPA's substantial discontinuation of targeted initiatives in the past three years - and its substitution of a focus on smaller violations of the Clean Water Act and other statutes - has thus been a very

significant (and unconstructive) change in the Agency's enforcement approach.

In addition, for much of the just completed fiscal year, a good deal of the civil judicial enforcement that EPA has attempted to pursue (including Clean Water Act enforcement) has been delayed (or ignored) as a result of an extraordinary shortage of attorney resources at the Department of Justice. Part of the reason for this shortage (which has, I expect, been at least temporarily alleviated by an infusion of new operating funds for the Justice Department at the start of the present fiscal year) was that last year DOJ assigned a very large number of its non-Superfund staff attorneys to try enforcement cases against electric utility companies, based upon the New Source Review provisions of the Clean Air Act. Even as the Justice Department's scarce prosecutorial resources were being expended in this way, however, other components of the Administration chose systematically to undercut those same top priority air enforcement cases, through a series of public statements and policy changes. By contributing to DOJ's resource shortfall in the water pollution field and other areas, these misguided actions harmed EPA enforcement well beyond the air pollution field.

In sum, as I have just described, over the past few years, EPA's attempts to enforce the Clean Water Act have lacked many of the elements that characterize successful environmental enforcement programs. From the best data presently available, it appears that the Agency's top leaders have failed to demonstrate (and to communicate unambiguously to the EPA's enforcement staff) that they value and support effective, deterrent enforcement efforts on the Agency's part. EPA's enforcement and inspection staff, which has long been understaffed and underfunded, contracted even further under the current administration. In many instances, EPA's knowledgeable senior enforcement

staff has been all but ignored by EPA political appointees, a development that has contributed to declining enforcement staff morale. EPA has generally declined to pursue the targeted enforcement strategy that succeeded for it in past years; and the Agency's numerical levels of enforcement activity have declined significantly in important respects.

Although further research into the current downturn in EPA water enforcement efforts - and the reasons that underlie it - is certainly warranted, in my view the best information currently available paints a discouraging, disturbing picture indeed. It would be unrealistic to expect that all of the problems that plague EPA's current water enforcement efforts can be remedied in a short time. Nonetheless, some steps that the EPA can take would certainly be helpful. First, EPA's next Administrator should communicate on repeated occasions to all Agency employees, without ambiguity or equivocation, that the Administrator places a very high priority on firm, evenhanded enforcement of Clean Water Act requirements. Second, funding for EPA's Office of Enforcement and Compliance Assistance should be increased significantly and promptly. Third, EPA should set a firm goal of reducing significant non-compliance by major water pollutant dischargers in a few key industrial sectors, and then follow up with targeted EPA enforcement initiatives to assure that that goal is achieved. Finally, EPA's current set of politically appointed managers, in the Agency's regional offices as well as its headquarters, should view EPA's senior career enforcement managers as genuine partners in an effort to improve EPA enforcement performance, rather than bureaucratic adversaries, to be ignored, thwarted, demeaned, or kept at arm's length.

In closing, I would like to observe that this subcommittee deserves much credit for recognizing the importance of vigorous EPA enforcement of the Clean Water Act. The



Center for Progressive Regulation respectfully urges you to remain focused on enforcement, as a leading target for continued, vigilant oversight of the EPA, in the months ahead.

#### Notes

1. Joel A. Mintz, Enforcement At the EPA: High Stakes and Hard Choices (Univ. of Texas Press, 1995).

2. For a sampling of these articles, see "Rebuttal: EPA Enforcement and the Challenge of Change," 25 *Env't'l. L. Rptr.* 10538 (October, 1996); "Scrutinizing Environmental Enforcement: A Comment on a Recent Discussion At the AALS," 30 *Env't'l. L. Rptr.* 10639 (August, 2000); and "Enforcement Overfiling in the Federal Courts: Some Thoughts on the Post-Harmon Cases," 21 *Virginia Env. L.J.* 425 (2003).

3. See Natural Resources Defense Council, Rewriting the Rules, Year-End Report 2002: The Bush Administration's Assault on the Environment (January, 2003) at 26. Beyond this, the current Administration's 2003 budget request recommends the elimination of another 200 EPA enforcement personnel.

4. Id. at 27.

5. Id.

6. Id.

7. See U.S. EPA, Office of Enforcement and Compliance Assurance, A Pilot for Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program (February, 2003).

8. Id. at 6-7.

**Testimony of Kerry Mackin, Executive Director of the Ipswich River Watershed Association (IRWA), to the House Government Reform Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs  
Field Hearing, Town Hall, Ipswich, Massachusetts, October 14, 2003**

In 1972, the United States Congress passed "watershed" legislation aimed at "restoring and maintaining the chemical, physical and biological integrity of the Nation's waters."<sup>1</sup> This important law has been instrumental in cleaning up water pollution from industrial discharges and antiquated wastewater treatment facilities. However, in the three decades since the Clean Water Act (CWA)<sup>2</sup> became the law of the land, the Ipswich River has become the third most endangered river in the nation (American Rivers, 2003), impaired under S. 303(d) of the CWA, and a "stressed basin" according to the Massachusetts Water Resources Commission.

The Ipswich River is pumped dry chronically, and major fish kills are commonplace. Last year, the river experienced the lowest flows ever recorded; and dirt bikes and ATV's tore up the riverbed where fishermen and swimmers should have been enjoying recreational uses protected under the CWA. Dissolved oxygen levels plummet in summer, consistently failing to meet Massachusetts Water Quality Standards, and often falling to levels lethal to aquatic life. Public water supplies have been contaminated by industrial pollution, but cleanups have lagged for years or even decades. While some improvements have occurred, several of these trends are worsening and spreading, exactly contrary to the intent of the CWA. In the Ipswich River, river fish like brook trout can no longer survive, and the river cannot attain its designated uses under the CWA<sup>3</sup>. Where has the regulatory system failed in its important purpose of restoring and protecting this vital natural resource?

- 1) The U.S. Environmental Protection Agency (EPA) jointly administers the CWA with the Massachusetts Department of Environmental Protection (DEP). State law directs the Massachusetts Department of Environmental Protection (DEP) to take all actions necessary or appropriate to secure the benefits of the CWA for the Commonwealth.<sup>4</sup> However, DEP has failed to promulgate effective and explicit standards to implement the CWA, especially in regard to physical and biological integrity. DEP's failure to set water quantity standards, and to identify the parameters that define biological integrity, result in a lack of enforcement even when rivers are completely dewatered, with devastating ecological consequences.
- 2) EPA leaves most enforcement activities to the state agency. However, DEP's enforcement of environmental laws has been far from effective, and EPA has not generally taken a direct and active role in remedying the lapses that have become commonplace at the state level. Communication and notification among EPA, DEP and citizens regarding enforcement procedures and the status of enforcement actions is poor and needs to be improved.

<sup>1</sup> 33 U.S.C. § 1251 (101)(a)

<sup>2</sup> Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq., Pub.L. 92-500. Regulations at 40CFR 130.0

<sup>3</sup> The Ipswich River and tributaries are listed on the S.303(d) List of Impaired Waters (Massachusetts Department of Environmental Protection, 1998); additional description of the physical, chemical and biological impairment of the Ipswich River is contained in *Ipswich River Fisheries: Current Status and Restoration Approach*, Ipswich River Fisheries Restoration Task Group, June 2002; and in a series of Water Resource Investigation reports by the United States Geological Survey.

<sup>4</sup> M.G.L. Ch. 21 §§ 26-53

- 3) A number of illegal and accidental discharges of toxic materials have plagued the Ipswich River and endangered public health, welfare and the environment. Hazardous waste releases have been a very serious problem in a number of locations, especially in the headwaters communities of Wilmington, Reading and North Reading, Massachusetts. These discharges have contaminated public drinking water supplies in those communities and harmed the environment. Just this year, public water supply wells in Wilmington were closed due to industrial contamination that persisted for decades. Nevertheless, DEP has failed to take effective action to prevent, enforce against, or clean up this contamination. Waivers delaying cleanup action are commonplace. One polluter has leaked toxic substances for 10 years while under DEP waivers; in another case toxic leaks have continued for 6 years without cleanup action. In a third case, 10 years passed, during which a barrel field of toxins leaked into groundwater, before DEP required cleanup activities. Illegal landfills (typically in wetlands) are generally capped rather than removed, resulting in continued exposure of the environment to hazardous materials, as well as filling and loss of valuable wetlands.

In total, contamination has resulted in temporary or permanent closures of wells in Wilmington, Reading, North Reading, Peabody and Topsfield, at the least. Current actions authorized by DEP, which allow extensive filling of wetlands, may exacerbate other water quality problems by destroying wetlands that play an important role in water quality protection.

- 4) The CWA concentrated initially on reducing the discharge of pollutants from "point sources" such as wastewater treatment plants and industrial facilities. In the Ipswich River Watershed, there are very few such discharges. The enforcement of discharge limits against industries has generally been effective in recent years. The only large industrial NPDES<sup>5</sup> permittee in the Ipswich River watershed is Bostik-Findley Inc. in South Middleton, the oldest industrial site in continuous use in America. The site has historically been the source of significant pollution, but thanks in large part to the CWA, the company has taken steps to reduce its impact on the Ipswich River and to clean up pollution on the site. Such enforcement continues to be instrumental in maintaining the health of the nation's waters.

However, the enforcement of pollution discharge violations by municipalities has been much slower. The Town of Ipswich is the only major wastewater treatment facility discharging into the Ipswich basin. This facility failed to comply with discharge limits for many years, and sewer system failures regularly spewed raw sewage into the Ipswich River several times per year. Commercially valuable shellfish beds and contact recreation, including public swimming beaches, were affected by the pollution. Despite the knowledge of these problems for more than a decade, and the highly sensitive estuarine environment that was affected by these illegal discharges, enforcement by DEP and EPA was extremely slow, excruciatingly patient, with little if any fines or penalties. Finally, just last year the Town of Ipswich completed major improvements to the wastewater treatment plant and collection infrastructure, which have addressed most of the pollution problems. While there are still occasional violations of the discharge limits for fecal coliform, and meeting the copper limit is elusive, the improvements are real and the benefits are tangible for the

<sup>5</sup> National Pollution Discharge Elimination System

region's shellfish industry, as well as for fishermen and swimmers. The loss is that the improvements should have been implemented at least a decade sooner than they were.

- 5) Ironically, the implementation of the anti-degradation provisions of the Massachusetts Water Quality Standards has actually resulted in more degradation, not less, in the Ipswich River Watershed. The reason is that the anti-degradation standards have been interpreted to preclude discharging treated wastewater in most areas of the watershed, thus encouraging out-of-basin transfers of wastewater via large regional sewer networks. These sewer systems remove not only wastewater, but also stormwater and clean groundwater from the watershed, resulting in a major water deficit. Approximately 20-25 million gallons of Ipswich River water is conveyed out of the watershed each day via sewers. In the headwater communities of Wilmington and Reading alone, more than 5 million gallons a day of water is exported; this volume of water is exactly the amount identified as the flow deficit in the upper reaches of the Ipswich River. This water is urgently needed in the river system to restore its physical, chemical and biological integrity, and allow attainment of its designated uses. The implementation of the CWA has not adequately anticipated and prevented the loss of water due to sewers, and has in effect caused degradation of our rivers and streams, instead of preventing it.
- 6) Certain Massachusetts statutes thwart the restoration of the Commonwealth's rivers, by authorizing actions that cause degradation, rather than ensuring anti-degradation. The Massachusetts Water Management Act (M.G. L. Ch. 21G) and the Interbasin Transfer Act (M.G.L. Ch. 21 §§ 8B-D) "grandfather" water withdrawals and wastewater transfers even in cases of documented extreme environmental damage. State implementation of these laws has legally enabled degradation of Massachusetts's waters to increase.
- 7) Ill-conceived storm water infrastructure is a major factor in rapidly conveying polluted water to streams, exacerbating erosion and flooding, as well as preventing the replenishment of groundwater that is needed to sustain river flows. Improved management of stormwater is a large priority to address both pollution and water quantity problems. In the past decade, the EPA has begun to address stormwater pollution under the CWA. However, the communities in the Ipswich River basin are only subject to Stormwater Phase II requirements, which are relatively weak and behind schedule. As one illustration, the Town of Ipswich recently submitted a "watered down" version of its stormwater plan, which complies with the weak Phase II requirements but is far less detailed and effective than the town's operational stormwater plan. To its great credit, Ipswich has implemented significant improvements to its stormwater system in the past decade, which combined with the wastewater system improvements described above, have allowed reopening of commercially valuable shellfish beds. Stormwater management has the potential to be a win-win avenue to address issues of local concern, such as flooding, as well as pollution and low-flow problems. However, more stringent requirements are needed to achieve significant improvements.
- 8) The current federal administration has taken steps to weaken long-standing protections under the Clean Water Act. Among these steps, reduced protection of wetlands is a major concern in the Ipswich River Watershed, which is comprised of an unusually high percentage (~20%) of wetlands. These wetlands are known to play a very important role in removing pollutants, as well as providing excellent wildlife habitat, reducing flood damage,

and providing a number of benefits to society. However, weakened protection is already resulting in revival of projects that were previously rejected. In one case in the Ipswich River basin, a project which was rejected by the President's Council on Environmental Quality under the first President Bush is now being revived, because President George W. Bush's administration has abandoned the strict provisions of the "no net loss of wetlands" policy and has limited jurisdictional areas. This policy change has in effect seriously weakened the protection of wetlands under the CWA, and threatens to further degrade the Ipswich River.

- 9) IRWA is particularly concerned about current efforts to eliminate or weaken implementation of the Total Maximum Daily Load (TMDL) Rule to limit pollutant discharges from "non-point" sources. A watershed analysis of pollution loading capacity based on a river's assimilative capacity is critical to address remaining stormwater pollution. Excluding consideration of impairment due to flow alteration weakened the proposed TMDL Rule. The CWA will not achieve its objectives if it fails to address non-point source pollutant loads and their concentrations, a function of the amount of water available. Failing to address these issues effectively, combined with the effects of growth, threatens to erode prior water quality improvements under the CWA.
- 10) The federal and Massachusetts governments explicitly recognize the value of watershed-based management of water resources, but their implementation of the "watershed approach" has not succeeded in achieving an integrated, holistic approach to protecting water resources. At the state level, budget cuts and reorganization have eroded and to some extent abandoned the watershed approach. There is a real need to more equitably distribute federal and state resources among watersheds, to ensure that small watersheds with big problems receive the attention and assistance they need and deserve.

Thank you very much for the opportunity to submit testimony regarding the implementation of the Clean Water Act and other environmental laws that are essential to the health of the nation's waters. I would be happy to provide further detail if this would be helpful to the Subcommittee.

Respectfully submitted,

*Kerry Mackin*

Kerry Mackin, Executive Director  
Ipswich River Watershed Association  
196 High Street, PO Box 576  
Ipswich, MA 01938-0576